

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF
MOUNT TIPTON WATER COMPANY FOR
A PERMANENT RATE INCREASE.

DOCKET NO. W-02105A-03-0303

Arizona Corporation Commission
DOCKETED

JUN 2 4 2004

DOCKETED BY



DIRECT

TESTIMONY

OF

CHARLES R. MYHLHOUSEN

PUBLIC UTILITIES ANALYST II

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

RECEIVED

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APRIL 16, 2004

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EXECUTIVE SUMMARY MOUNT TIPTON WATER COMPANY DOCKET NO. W-02105A-03-0303

Mount Tipton Water Company ("Company") is a non-profit cooperative that is engaged in the business of providing public utility water service exclusively to Arizona customers in Mohave County. The Company operates a water system in a certificated area centered in Dolan Springs, Arizona and provided service to approximately 740 customers during the test year ended December 31, 2002.

The Company's rate application requested an increase in revenues of \$142,629 or a 48.32 percent increase over test year revenues of \$295,198. Staff recommends an increase in revenues of \$54,244 or 19.29 percent over adjusted test year revenues of \$281,200. Staff's recommended operating revenue requirement is \$335,444 and is \$102,383 less than the Company's \$437,827.

Staff recommends an original cost rate base ("OCRB") of \$652,856, which is \$553,861 less than the Company's proposed rate base of \$1,206,717. Staff's recommended rate base adjustments encompass the following major issues:

- 1. A decrease in plant in service of \$450,849
- 2. An increase in accumulated depreciation of \$327,615.
- 3. An increase in accumulated amortization of contributions-in-aid-of-construction ("CIAC") of \$192,278.
- 4. A decrease in advances-in-aid-of-construction ("AIAC") of \$8,740.
- 5. A decrease in customer deposits of \$33,214.
- 6. A decrease in cash working capital of \$9,629.

Staff recommends test year operating expenses of \$247,962, which is \$139,787 less than the Company's proposed \$387,748. Staff's recommended rates result in a 13.40 percent rate of return on an OCRB of \$652,856, which would increase the typical residential bill at a median usage of 3,342 gallons from \$23.50 to \$27.35 for an increase of \$3.85 or 16.4 percent. The Company's proposed increase would increase the typical residential bill at a median usage of 3,342 gallons from \$23.50 to \$35.29 for an increase of \$11.79 or 50.2 percent.

SERVICE LIST

(THE SERVICE LIST FOR TESTIMONY IS GENERALLY HANDLED BY THE LEGAL DIVISION.)

INTRODUCTION

- Q. Please state your name, occupation, and business address.
- A. My name is Charles R. Myhlhousen. I am a Public Utilities Analyst II employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst II.

A. In my capacity as a Public Utilities Analyst II, I conduct audits and prepare reports, recommendations, and provide expert testimony on behalf of Commission Staff in evidentiary hearings. Within this framework, the Public Utility Analyst II position is responsible for conducting case preparation/analysis in rate proceedings, finance applications and Certificate of Convenience and Necessity ("CC&N") proceedings, among others.

Q. Please describe your educational background and professional experience.

A. I graduated from Bellevue University. I have a BA in accounting. I worked for the Internal Revenue Service as a Revenue Agent for over twenty years conducting audits. In October 2000, I was employed by the Commission as an Auditor II in the Accounting & Rates Section's Financial Analysis Unit. Since that time, I have attended various seminars and classes on general regulatory and business issues. In 2001 my job title was changed to Public Utilities Analyst II.

on May 13, 2003.

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Q. What is the scope of your testimony in this case?

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A. I am presenting Staff's analysis and recommendations concerning the original cost rate base ("OCRB"), revenue requirement and the rate design regarding the Mount Tipton Water Company ("Mt. Tipton" or "Company") water rate increase application docketed

The original application was filed on May 13, 2003, but Staff found the application

insufficient. The Company amended it on August 11, 2003. Staff found the application

Staff performed a regulatory audit of the Company's books and records to determine

whether sufficient evidence exists to support the Company's request for an increase in its

rates and charges. The regulatory audit consisted of examining Company books and

records, reviewing accounting ledgers and reports, tracing recorded amounts to source

documents, and verifying that the accounting principles applied are in accordance with

the National Association of Regulatory Utility Commissioners ("NARUC") Uniform

In the course of completing these duties, Staff conducted an on-site audit of the

Company's books and records, held numerous discussions with Company representatives

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Q. When was the application for rate increase filed by the Company?

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Q. What is the basis of Staff's recommendations?

sufficient on September 8, 2003.

System of Accounts ("USoA").

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Q. What test year was used by the Company in the filing?

and issued several written requests for data.

A. The Company used the twelve months ending December 31, 2002.

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Q. Did Staff accept the test year proposed by the Company?

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A. Yes. The December 31, 2002, test year selected was the most recent fiscal year available and should present a fairly accurate representation of the Company's financial operations for the determination of appropriate rates and charges.

The Company is a non-profit cooperative engaged in the business of providing public

utility water exclusively to Arizona customers. The Company operates a water system in

Dolan Springs, Arizona that provided service to an average of 740 customers during the

test year. In December 2001, the Company purchased Dolan Springs Water Company

customers of both water companies and operates the water system under Mount Tipton

The Company is proposing operating revenues of \$437,827. The Company revenue

results in an increase of \$142,629 or a 48.32 percent increase over test year revenues of

\$295,198, as shown on Schedule CRM-1. This would increase the typical monthly

residential bill at a median usage of 3,342 gallons from \$23.50 to \$35.29 for an increase

The Company presently serves

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BACKGROUND

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Q. Please briefly describe the Company background.

("Dolan") to have an adequate supply of water.

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SUMMARY OF RECOMMENDATIONS

of \$11.79 or 50.2 percent.

Water Company.

17 18 Q. Please summarize the Company's proposed revenues and Staff's recommended revenues?

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- 1 2

Q. Please summarize Staff's recommendation for the Company's water revenues.

- A. Staff is recommending operating revenues of \$ 335,444 which represents an increase of \$54,244 or a 19.29 percent over adjusted test year revenue of \$281,200. This would increase the typical residential bill from \$23.50 to \$27.35 for an increase of \$3.85 or 16.4 percent. Staff's recommendation results in a rate of return of 13.40 percent on an OCRB of \$652,856 versus the Company's proposed 4.15 percent on an OCRB of \$1,206,717.
- Q. Does Staff disagree with the Company's pro forma adjustments?
- A. Yes, the Company made a pro forma adjustment to revenue of \$213,503. This item will be discussed in more detail under the operating revenues section, which appears later in this testimony. Staff also disagrees with the Company's pro forma expense adjustments and will be discussed in more detail under the operating expenses section, which appears later in this testimony.

COMPLIANCE

- Q. Has Staff determined that the Company is in compliance with Mohave County Assessor, Arizona Department of Revenue ("ADOR"), Arizona Department of Environmental Quality ("ADEQ") and Arizona Corporation Commission ("ACC")?
- A. The Company is not in compliance with the Mohave County Assessor. The Company has an agreement to make payments on past due taxes until they are current and is making the payments. The Company is not in compliance with ADOR and is currently making payments to become current and be in compliance. The Company is in compliance with ADEQ. The Company is in good standing with ACC.

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ORIGINAL COST RATE BASE

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Q. Has Staff prepared a schedule detailing the Company's proposed OCRB and Staff's recommended OCRB?

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A. Yes. Detail on the Company's proposed OCRB and Staff's recommended OCRB is located on Schedule CRM-3.

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Q. Did the Company prepare a schedule detailing the elements of a reconstruction cost new less depreciation ("RCND") rate base?

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A. No. The Company did not file an RCND schedule. Therefore, as by rule, Staff utilized OCRB as fair value rate base ("FVRB").

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Q. Is Staff recommending a different OCRB than that proposed by the Company?

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A.

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of \$652,856, or a difference of \$553,861.

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Q. Please identify Staff's individual adjustments to rate base.

17 18 a. Plant in service was decreased by \$450,849 to reflect the additions and retirements not booked by the Company.

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b. Accumulated depreciation was increased by \$327,615. The Company was using the incorrect depreciation rate.

Yes. The Company proposed an OCRB of \$1,206,717. Staff is recommending an OCRB

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c. Contributions-in-aid-of-construction ("CIAC") were amortized in the amount of \$192,278. The Company did not amortize this account in prior years.

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d. Advances-in-aid-of-construction ("AIAC") were decreased in the amount of \$8,740 to reflect the actual amount of AIAC.

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e. Customer deposits were decreased in the amount of \$33,214 to reflect the actual amount of deposits.

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Reports as explained below.

1 2 f. Cash working capital was decreased in the amount of \$9,629 to reflect Staff's recommended reduction in expense.

Company's figure of \$2,129,117, to Staff's recommended figure of \$1,678,268. The

difference is the result of the comparison of the plant in service as shown in the

Company's ledger and Staff's analysis of the information provided in the Utilities Annual

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PLANT IN SERVICE

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Q. Please summarize Staff's plant in service as shown on Schedule CRM-3 A. Staff's recommended plant in service results in a decrease of \$450,849 from the

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Since all Staff's adjustments to plant were calculated following the same methodology explained above, there is no need to explain each individual plant category adjustment.

Please explain how Staff arrived at its recommended plant in service balance. Q.

A. In December 2001, The Company purchased the assets of Dolan Springs. Consequently, Staff's proposed plant in service is the combined original cost values of Dolan Springs and Mount Tipton.

Staff's recommended plant values were derived by consolidating the balance of the individual plant categories of Dolan Springs and Mt. Tipton as shown in the 2001 Utilities Annual Report. Staff further increased and decreased plant in service by the additions and retirements as shown in the Mt. Tipton's 2002 Utilities Annual Report. Staff further reclassified \$657,936 form Other Plant Structures and Improvements which represent the total plant purchased from Dolan Springs to the appropriate plant categories. The totality of this adjustment resulted in a reduction in plant in service of \$450,849.

ACCUMULATED DEPRECIATION

in test year or prior years.

AIAC.

deposits.

ADVANCES IN AID OF CONSTRUCTION

deprecation rate to compute deprecation expense.

CONTRIBUTIONS IN AID OF CONSTRUCTION

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CASH WORKING CAPITAL ALLOWANCE

- Q. Please explain Staff's adjustment to allowance for working capital.
- Staff decreased allowance for working capital by \$9,629 based on its adjustments to A. operating expenses.

Staff's adjustment number 20 as shown on Schedule CRM-3A increased accumulated

depreciation by \$327,615 from \$539,418 to \$867,033. The Company used an incorrect

Staff's adjustment number 21 increased the amortization of contribution-in-aid-of

construction by \$192,278 from zero to \$192,278. The Company did not amortize CIAC

Staff's adjustment number 22 decreased advances-in-aid-of-construction by \$8,740 from

\$20,501 to \$11,761, to adjust the general ledger account to reflect the actual amount of

Staff's adjustment number 23 decreased customer deposits by \$33,214 from \$61,036 to

\$27,822, to adjust the general ledger amount to reflect the actual amount of customer

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OPERATING REVENUE

- Did Staff prepare a schedule showing the Company's test year revenue and Staff's Q. recommended test year revenues?
- Yes. This information is found on Schedule CRM-4 which reflects both the Company as A. filed and Staff's recommended revenues and expenses at present and proposed rates.
- Q. Is Staff recommending any changes to the Company's test year operating revenue?
- A. Yes. Staff's adjustment number 1 increased metered water sales by \$7,002 to reflect the revenue produced by the Company's bill counts.

Staff's adjustment number 2 decreased Regulators and Other Income revenue account by \$21,000 to reflect the removal of hook-up fees included in this account.

The Company requested a Capital Maintenance Charge and Development Fees in its proposed income statement. Staff did not consider the Company's proposed capital maintenance charge of \$11,337 and development fees of \$15,350 from its Schedule CRM-4 due to the lack of explanation and justification for the requested fees.

- Did Staff prepare a schedule showing the Company's proposed operating expenses Q. and Staff's recommended operating expenses?
- Yes. This information is found on Schedule CRM-4. A.
- Is Staff recommending any changes to the Company's test year and proposed \mathbf{Q} . operating expenses?
- Yes. Staff is recommending an operating expense level in the test year of \$247,962 or A. \$139,787 less than the Company's proposed \$387,748.

1 2 Q.

Please explain Staff's adjustment number 3 to repairs and maintenance.

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average repair expense for the six prior years and to remove capital items and reclassify

Staff's adjustment number 3 decreased repairs and maintenance by \$45,137 to reflect the

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A.

them to plant in service.

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Q. Please explain Staff's adjustment number 4 to wages.

7 8 A. Staff's adjustment number 4 increased wages by \$9,405 that represents Staff's net pro forma adjustment for new employees and the removal of employees no longer employed

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by the Company.

plant in service.

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Q. Please explain Staff's adjustment number 5 to water testing/analysis.

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Staff's adjustment number 5 increased water testing/analysis by \$2,598 to reflect the A. amount of testing expense computed by Staff's engineer.

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Q. Please explain Staff's adjustment number 6 to engineering/survey.

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A. Staff's adjustment number 6 decreased engineering/survey by \$9,037 to reclassify to

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Please explain Staff's adjustment number 7 to advertising expense. Q.

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A. Staff's adjustment number 7 removed advertising expense of \$2,120. The amount was paid to form a water district and is a non-recurring expense.

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Q. Please explain Staff's adjustment number 8 to loan origination fees.

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A.

Staff's adjustment number 8 removed loan origination fees of \$11,642. This amount

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represents loan payments to the Water Infrastructure Finance Authority ("WIFA").

Please explain Staff's adjustment number 9 to bank service charges. 1 Q. Staff's adjustment number 9 removed bank service charges of \$18,387. This amount 2 A. 3 represents payments on the WIFA loan. 4 5 Please explain Staff's adjustment number 10 to system inspection. Q. Staff's adjustment number 10 decreased system inspection by \$700. This testing expense 6 A. is now no longer needed. The Company has a full time operator who does the testing. 7 8 9 Please explain Staff's adjustment number 11 to contributions. Q. Staff's adjustment number 11 removed charitable contributions of \$80. This is a Co-op. 10 A. 11 Please explain Staff's adjustment number 12 to maps. 12 Q. Staff's adjustment number 12 removed maps of \$184. This is a one time expense for the 13 A. Company. 14 15 Please explain Staff's adjustment number 13 to outside services. 16 Q. Staff's adjustment number 13 removed outside services of \$595. This amount was taken 17 A. into consideration when arriving at the amount for water testing/analysis and will no 18 19 longer be a separate expense. 20 Please explain Staff's adjustment number 14 to rate application expense. 21 Q. Staff's adjustment number 14 decreased rate application expense by \$5,333. This is the 22 Α. result of Staff amortizing this expense over three years. 23 24

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Q. Please explain Staff's adjustment number 15 to land lease.

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A. Staff's adjustment number 15 decreased land lease by \$3,097. To reclassify to well maintenance materials account.

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Q. Please explain Staff's adjustment number 16 to less-allocated to maintenance.

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A. Staff's adjustment number 16 removed less-allocated to maintenance by \$3,097. To eliminate this account since it is reflected in well maintenance materials account.

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Q. Please explain Staff's adjustment number 17 to supplies-office.

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A. Staff's adjustment number 17 decreased supplies-office by \$2,204 for items that are a one time expense and will not be reoccuring.

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Q. Please explain Staff's adjustment number 18 to payroll taxes.

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A.

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Staff's adjustment number 18 increased payroll taxes by \$58, consistent with Staff's adjustment to wages.

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Q. Please explain Staff's adjustment number 19 to unemployment taxes.

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A. Staff's adjustment number 19 decreased unemployment taxes by \$1,030, consistent with Staff's adjustment to wages.

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Q. Please explain Staff's adjustment number 20 to taxes-real estate.

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A. Staff's adjustment number 20 decreased taxes-real estate by \$1,562. Staff used the Arizona Department of Revenue ("ADOR") new modified methodology for determining full cash value for property tax purposes. This formula uses an average of three years of reported gross revenue multiplied by a factor of two as a basis for assessed value. The

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process results in a full cash value amount to which an assessment ratio and finally the

 tax rate are applied. A three-year average of gross revenue was calculated resulting in a property tax expense level of \$18,093.

Q. Please explain Staff's adjustment number 21 to consulting.

A. Staff's adjustment number 21 decreased consulting by \$32,739. The Company will not incur this one-time expense in going-forward years.

Q. Please explain Staff's adjustment number 22 to management consultant.

A Staff's adjustment number 22 decreased management consultant by \$6,200. The company will not incur this one-time expense in going-forward years.

Q. Please explain Staff's adjustment number 23 to depreciation.

A. Staff's adjustment number 23 decreased depreciation by \$14,862. Staff calculated depreciation expense on a going-forward basis using the recommended depreciation rates shown in the Engineering Report.

REVENUE REQUIREMENT

Q. What is the Company's proposed revenue requirement and Staff's recommended revenue requirement?

A. Staff's recommended rates result in operating revenue of \$335,444 and operating income of \$87,482 for a 13.40 rate of return on an OCRB of \$652,856. The Company's proposed rates produce operating revenues of \$437,827 and operating income of \$50,079 for a 4.15 percent rate of return on an OCRB of \$1,206,717.

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- Q. Did Staff prepare a schedule summarizing its recommended increase in gross revenue requirement?
- A. Yes. Please refer to Schedule CRM-4, columns d and e.

RATE DESIGN

- Q Has Staff prepared a schedule showing the Company's proposed rates and charges and Staff's proposed rates and charges?
- A. Yes. Please refer to Schedule CRM-5
- Q. Please explain Staff's proposed rate design.
- A. The present rate design consists of a base rate and a commodity charge in three tiers. The Company's proposed rate consists of six tiers. Staff's recommended rate structure consists of three tiers and is compatible with water conservation efforts.
- Q. Has Staff recommended a change in the Company's proposed bulk commodity charges?
- A. Yes. Staff's bulk rate commodity charge was determined by considering the total gallons sold and the percentage of bulk sales to metered sales. The Company did not justify its proposed commodity charge.
- Q. Has Staff' recommended a change in the Company's proposed service charges?
- A. Yes. The Company did not justify the proposed increases or additional service charges.

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median usage of \$3.85 versus the Company's increase of \$11.79. STAFF RECOMMENDATIONS

Company's proposal and Staff's recommended rates?

- Please summarize Staff's recommendations in this proceeding. Q.
- Staff recommends that the Commission approve Staff's rates and charges as shown on A. Schedule CRM-5.

Staff further recommends that the Company be allowed to collect hook-up-fees per Schedule CRM-5 page 2. Additionally, the Company should have a separate, interest earning bank account for the hook-up fees.

Has Staff prepared a schedule representative of the typical bill under the

Yes. Please refer to Schedule CRM-6A. The typical residential bill as shown in

Schedule CRM-6A reflects that Staff's recommended rates result in an increase at the

Staff further recommends that the Company submit quarterly reports, due by the 15th of the month following the end of the calendar quarter, to Docket Control that contain the following facts:

- The name of each person/entity charged a hook-up fee and the amount charged. 1.
- The balance of the hook-up fee account and interest earned on the account. 2.
- A detailed list of plant items purchased from the hook-up fee account, along with 3. the purchase amounts.
- If there are no hook-ups during a quarter then a quarterly report will be submitted 4. reflecting this fact.

Stoff firether recommends a provision be included in the Cor

shown in Exhibit 6 of the Engineering Report.

Staff further recommends a provision be included in the Company's tariff to allow for the flow-through of all appropriate state and local taxes as provided in A.A.C. Rule 14-2-409(D)(5).

Staff further recommends that the Company be ordered to use the depreciation rates as

Staff further recommends that the Company be ordered to notify its customers of the rates and charges approved by the Commission and the effective date by means of an insert in its next regular monthly billing following a Decision in this matter. The Company shall also docket a copy of this notice within 60 days of the effective date of a Decision in this case.

Staff further recommends that the Company reduce its water loss to less than 10 percent within eighteen months after the effective date of the Decision in this matter. Staff further recommends that the Company file quarterly reports with the Director of the Utilities Division, indicating the quantity of water pumped and sold each month during the quarter and the efforts made to reduce water loss, such as number of leaks repaired, meters replaced, pipeline flushing, etc. The quarterly report should be based on the calendar year, with the first report being filed within 120 days of the effective date of the Decision in this matter. The reporting may end, if approved by Staff, if the Company shows that average water loss for two consecutive quarters is below 10 percent.

If after eighteen months of the effective date of the Decision in this matter the Company has failed to reduce its non-account water below 15 percent, Staff further recommends that any new Main Extension Agreements submitted by the Company should be denied

until the Company shows that average water loss for two consecutive quarters is below 15 percent.

If the Company finds that water loss can only be reduced to less than 15 percent, but not less than 10 percent within eighteen months after the effective date of the Decision in this matter, the Company shall submit, by December 31, 2005, or prior to its next rate case whichever comes first, a detailed cost analysis and explanation demonstrating why water loss reduction to less than 10 percent is not cost effective.

Staff further recommends that the Company be ordered to bring its books and records into compliance with the NARUC systems of accounts to include listing plant in service by individual account number and reflecting the correct plant balances, accumulated depreciation, and other general ledger account amounts to comply with the approved amounts in this Decision. In order to demonstrate the above, the Company should docket copies of its general ledger, to include all corrections, within 90 days of the effective date of the Decision in this mater.

Q. Does this conclude your direct testimony?

A. Yes, it does.

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CRM-3A-13	Rate Base Adjustments #13 Other Plant - Structure and Improvements
CRM-3A-14	Rate Base Adjustments #14 Office Furniture and Fixtures
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CRM-3A-17	Rate Base Adjustments #17 Power Operated Equipment
CRM-3A-18	Rate Base Adjustments #18 Miscellaneous Equipment
CRM-3A-19	Rate Base Adjustments #19 Other Tangible Equipment
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MOUNT TIPTON WATER COMPANY Docket No. W-2105A-03-0303 Test Year Ended December 31, 2002

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CRM 4-5	Operating Adjustment # 5 Water Testing/Analysis
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CRM 6-7	Operating Adjustment # 7 Advertising Expense
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CRM-6B	Actual Bill Analysis

MOUNT TIPTON WATER COMPANY Docket No. W-02105A-03-0303 Test Year Ended December 31, 2002 Schedule CRM-1

REVENUE REQUIREMENT

LINE <u>NO.</u>	<u>DESCRIPTION</u>	(A) OMPANY PRIGINAL <u>COST</u>	C	(B) STAFF RIGINAL <u>COST</u>
1	Adjusted Rate Base	\$ 1,206,717	\$	652,856
2	Adjusted Operating Income (Loss)	\$ (92,550)	\$	33,238
3	Current Rate of Return (L2 / L1)	-7.67%		5.09%
4	Required Rate of Return	4.15%		13.40%
5	Required Operating Income (L4 * L1)	\$ 50,079	\$	87,483
6	Operating Income Deficiency (L5 - L2)	\$ 142,629	\$	54,244
7	Gross Revenue Conversion Factor	1.0000	*	1.0000
8	Required Revenue Increase (L7 * L6)	\$ 142,629	\$	54,244
9	Adjusted Test Year Revenue	\$ 295,198	\$	281,200
10	Proposed Annual Revenue (L8 + L9)	\$ 437,827	\$	335,444
11	Require Increase in Revenue (%)	48.32%		19.29%
12	Rate of Return on Common Equity (%)	NMF		NMF

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FINANCIAL ANALYSIS

December 31, 2002 Income Statement

		<u>Sta</u>	[A]
		<u> </u>	<u> 211</u>
1	Operating Income	\$	87,483
2	Depreciation & Amort.		53,094
2 3	Income Tax Expense		0
4			
5	Interest Expense		74,164
6	Repayment of Principal		43,456
7			
8	_		
9	TIER ¹		
10	[1+3] ÷ [5]		1.18
11	DSC	577073600	
12	[1+2+3] ÷ [5+6]	. Civata	1.20
13	Cash Coverage Ratio		4.00
14	[1+2+3] ÷ [5]		1.90
15			
16 17			
18			
19			
20			
21			
22			
23			
24			
25			
26			

MOUNT TIPTON WATER COMPANY Docket No. W-02105A-03-0303 Test Year Ended December 31, 2002

RATE BASE - ORIGINAL COST

LINE NO.		C	(A) COMPANY AS FILED		(B) STAFF JSTMENTS	<u>Al</u>	(C) STAFF AS DJUSTED
1 2	Plant in Service Less: Accumulated Depreciation	\$	2,129,117 539,418	\$.	(450,849) 327,615	\$	1,678,268 867,033
3	Net Plant in Service <u>LESS:</u>	\$	1,589,699	\$	(778,464)	\$	811,235
4 5	Contributions in Aid of Construction (CIAC) Less: Accumulated Amortization	\$	347,002 -	\$	- 192,278	\$	347,002 192,278
6	Net CIAC		347,002		(192,278)		154,724
7	Advances in Aid of Construction (AIAC)		20,501		(8,740)		11,761
8	Customer Deposits		61,036		(33,214)		27,822
9	Meter Advances	-	-		-		-
10	Deferred Income Tax Credits		-		-		-
	ADD:						. 2.
11	Cash Working Capital		26,418		(9,629)		16,789
12	Prepayments	•	4,139		-	÷	4,139
13	Supplies Inventory		15,000				15,000
14	Projected Capital Expenditures		-	,	-		-
15	Deferred Debits				-	•	-
16	Other Additions		-		-		- .
17	Total Rate Base		1,206,717	\$	(553,861)	\$	652,856

PLANT ADJUSTMENT

	 ompany as Filed	A	djustment	Staff Adjustment
301 Organization	\$ _	\$	17,450	\$17,450
302 Franchises	313		187	500
303 Land and Land Rights	3,600		6,242	9,842
304 Structures and Improvements	44,507		18,578	63,085
307 Wells and Springs	385,697		43,351	429,048
311 Electric Pumping Equipment	104,325		(85,262)	19,063
320 Water Treatment Equipment	-		53,075	53,075
330 Distribution and Reservoirs & Standpipe	180,926		24,565	205,491
331 Transmission & Distribution Mains	513,191		165,220	678,411
333 Services	96,205		(29,012)	67,193
334 Meters	79,613		(9,906)	69,707
335 Hydrants	1,230		(1,230)	0
339 Other Plant Structures/Improvements	658,934		(657,936)	998
340 Office Furniture and Fixtures	21,889		(5,282)	16,607
341 Transportation Equipment	24,540		4,131	28,671
343 Tools & Work Equipment	6,274		3,014	9,288
344 Laboratory Equipment	-		-	0
345 Power Operated Equipment	-		167	167
346 Communication Equipment	-		.	0
347 Miscellaneous Equipment	-		8,464	8,464
348 Other Tangible Plant	7,873		(6,665)	1,208
	\$ 2,129,117	\$	(450,849)	1,678,268

MOUNT TIPTON WATER COMPA Docket No. W-02105A-03-0303

Summary of Rate Base Adjustments

STAFF ADJUSTED	-	1	85	80 63	30.50	\$ 429,040	\$ 19,063	\$ 53,075	\$ 205,491	\$ R7R 411	4070	5 67,193	\$ 69,707	٠	866 \$	\$ 16,607	\$ 28,671	\$ 9.288	5	187			0,000	\$ 1.208	\$ 1,678,268	\$ 60,033	\$ 811,233		\$ 347,002	192,278	\$ 154,724	\$ 11,761	\$ 27,822	•	•		\$ 16,789	\$ 4,139	\$ 15,000	5		~	\$ 652,858
fXI ADJ#24		1						٠		ļ.																	,		•								(9,629)				,		\$ (9,629)
MI ADJ # 23	-	ı		Ī	·	-		٠		1		•				•		,	,								*		•	•			(33,214)				,	,	·	-	•		\$ 33,214
M ADJ # 22		1		1		-			•	ľ		•	•	•		•		,									7		•			(8,740)	,				•		,	·			\$ 8.740
[U] ADJ#21		١			1					ľ	•	•	,									1	1			-				192,278	(192,278)	•	•		•		•				•	•	\$ 192,278
ADJ# 20						•		•	-		-	•								ŀ			1			327,615	327,615)				•	•		,	•		,	•		-	•	I ₿	1327,615)
(SI ADJ#19	-			1	1	•					,	•	-							<u> </u>	1	1		(6,665)			\$ (6,865)		\$		٠			•	•		,		•	-		i. 1	\$ (6,665)
IRI ADJ#18	•			1	1					ŀ	•									1			6,464		\$ 8,464		\$ 8,484				,	,	•				,			•	•		\$ 8,464
foi ADJ#17	-				•	•		•	,		1	1	•		•					787		Ì			167		2 167		\$		•	·					•		•			•	\$ 167
IP) ADJ#16		ŀ				•					•		•	•				3.014							\$ 3,014		3.014									ì		•		•			\$ 3,014
IOI ADJ#15	_		ľ			,	-					•	,				4.131			ľ					\$ 4,131		\$ 4,131											•		•			\$ 4,131
ADJ#14	_					,	,		١.	Ī			,			(5,282)				ŀ	Ī		•	-	\$ (5,282)		\$ (5,282)													•			\$ (5,282)
IM ADJ#13				1	1	•	,		ļ .	1		•			(857, 936)										\$ (857,936)		\$ (657, 936)																\$ (857,938)
ILI ADJ#12	-					,				ŀ	•	•		(1,230)			- -	-			\dagger	-	•	_	\$(1,230)		\$(1,230)						•		·					-			\$(1,230)
PKI ADJ#11	-		ľ	-	•	•	•			t	•	•	(906)		•					ŀ	1			•	\$ (9.806)		\$ (9,906)			٠	•	-			,			,					\$ (9,906)
1.3 AD3#10	-			•	•					İ		(29,012)				-			<u> </u>			1		1	\$(29,012)		\$(29,012)										-		•				\$(29,012);
MP PB	_			-	•			- -	,	ACC 304	165,220														\$185,220	÷	\$165,220				-		•				-	-			-	Ц	\$185,220
HI ADJ#8	-			•	•				24 565	21,000				•		- -		-						4	\$ 24,585	-	\$ 24,565		•			•	•	•						•		ш	\$ 24,565
FGI ADJ#7	-		1	•	•	•		53.075			1	•										•	•	1	\$ 53,075		\$ 53,075						-		-			•		•	-		\$ 53,075
IFI ADJ #8	-	•				-	(85,262)				•	•									•		-	_	\$(85,262)		\$(85,262)								•					•	•	, ,	
IEI ADJ#5	-	•	1	•		43,351					•			·							+		-	4	\$ 43,351	_	\$ 43,351						•							•	•	•	\$ 18,578 \$ 43,351 \$(85,262)
ADJ #4	_	•			18,578					•	,									1	•	•	•	-4	\$ 18,578		\$ 18,578							•								·	18,578
FCI ADJ #3	-	1		247	-					+										1	+	-	•	_	\$ 6,242	_	\$ 6,242			-		-						_		-	-		\$ 6,242
IBI ADJ#2	-	2	1	+	•		- -	- -		1	•	-				-		ļ.		-	+	-	-	4	\$ 181		187		•	-	 -	-	<u> </u>	<u> </u>	-								187
ADJ#1		\$ 17,450 \$					ļ.	-		-	-			ļ.	-	-	ļ.	-	1		-	1	,	,	\$ 17,450 \$	-	\$ 17,450 \$,	-					ļ.							-	\$ 17,450 \$
COMPANY AS FILED A	-	2	2000	3,600	44,507	385,697	104.325		460 024	07,350	513,191	96,205	79,613	1,230	658.934	21.889	24 540	A 27.4	1		-	<u> </u>		4	_	_	\$1,589,699		47,002 \$		347,002	20,501	51,036	<u> </u>	_		26,418	4,139	15,000	_	-	-	\$ 1,206,717
COM	•	2			*	36	1			l	"	J			8	l	ľ								\$2,12	S	\$1,5		1 (CIP \$ 34		, A		٦				14						\$1.20
LINE DESCRIPTION	PLANT IN SERVICE:	1 Organization	Z Franchises	3 Land & Land Rights	4 Structures & improvements	5 Wells and Springs	6 Electric Pumpling Equipment	1	1	ľ	- 1	10 Services	1	12 Hydrants	ł	ł	L	1	Γ	1	1			21 Other Tangible Plant	22 Total Plant in Service	23 Less: Accumulated Depreciation	14 Net Plant in Service (L23 - L24)	LESS	5 Confributions in Aid of Construction	26 Less: Accumulated Amortization	27 Net CIAC (L25 - L28)	28 Advances in Aid of Construction (AIAC)	29 Customer Deposits	10 Meter Advances	31 Deferred Income Tax Credits	ADD:	32 Cash Working Capital Allowance	3 Prepayments	34 Supplies Inventory	35 Projected Capital Expenditures	6 Deferred Debits	7 Other Additions	18 Total Rate Base

Total Case	Schedule CRM 4-11	Schedule CRM 4-12	Schedule CRM 4-13	Schedule CRM 4-14	Schedule CRM 4-15	Schedule CRM 4-16	Schedule CRM 4-17	Schedule CRM 4-18	Schedule CRM 4-19	
	Meters	Hydrents	Other Plant Stru	Office Furniture	Transportation	Tools	Power Equip	Miscell Equip	Other lengthie	
\$	=	2	5	7	5	92	4	=	\$	

References:	Schedule CRM 4-20	Schedule CRM 4-21	Schedule CRM 4-22	Schedule CRM 4-23	Schedule CRM 4-24	
	Accum Depr	CIAC Amortiz	AIAC	Cust Deposits	Cash Working Capital	
 *POY	20	2	22	2	75	_

Docket No. W-02105A-03-0303 Test Year Ended December 31, 2002 Schedule CRM 3A - 1

PLANT ADJUSTMENT #1, ORGANIZATION

LINE NO.		[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF	
	DESCRIPTION					ADJUSTED	
1	Organization Costs	\$	-	\$	17,450	\$	17,450
	•						
	REFERENCES:						
	Column [A]: Line 1	Sched	dule CRM-4	A, Column	[A] Line 1		
	Column [B]: Line 1	Sched	dule CRM-4.	A, Column	, Column [B] Line 1		
	Column [C]: Line 1	Sched					

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Test Year Ended December 31, 2002

Schedule CRM 3A - 2

PLANT ADJUSTMENT #2, FRANCHISES

LINE NO.		[A] COMPANY		S	[Β] ΓAFF	[C] STAFF		
	DESCRIPTION	AS FILED		<u>ADJU</u>	<u>STMENT</u>	<u>ADJI</u>	<u>JSTED</u>	
1	Franchises	\$	313	\$	187	\$	500	
	REFERENCES:							
	Column [A]: Line 1	Sched	dule CRM-4A	A, Column [A] Line 2				
	Column [B]: Line 1	Sched	dule CRM-4A	A, Column	[C] Line 2			
	Column [C]: Line 1	Sched						

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Test Year Ended December 31, 2002

Schedule CRM 3A - 3

PLANT ADJUSTMENT #3, LAND AND LAND RIGHTS

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		COMPANY		[B] STAFF <u>ADJUSTMENT</u>		COMPANY STAFF			[C] TAFF <u>USTED</u>
1	Land and Land Rights	\$	3,600	\$	6,242	\$	9,842				
	REFERENCES:										
	Column [A]: Line 1	Sche	edule CRM-4/	A, Column	[A] Line 3						
	Column [B]: Line 1	Schedule CRM-4A, Column [D] Line 3									
	Column [C]: Line 1	Sche									

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Test Year Ended December 31, 2002

Schedule CRM 3A - 4

PLANT ADJUSTMENT #4, STRUCTURES AND IMPROVEMENTS

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		[B] STAFF		DMPANY STAFF		AFF		
	DESCRIPTION			ADJ	<u>ADJUSTMENT</u>		JUSTED	<u>D</u>		
1	Structures and Improvements	\$	44,507	\$	18,578	\$	63,085			
	REFERENCES:				•					
	Column [A]: Line 1	Schedule CRM-4A, Column [A] Line 4								
	Column [B]: Line 1	Sche	edule CRM-4/	A, Columr	n [E] Line 4					
	Column [C]: Line 1	Schedule CRM-4A, Column [Y] Line 4								

MOUNT TIPTON WATER COMPANY Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 3A - 5

PLANT ADJUSTMENT #5, WELLS AND SPRINGS

LINE <u>NO.</u>		[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>			[C] STAFF
	DESCRIPTION					<u>A</u> [JUSTED
1	Wells and Springs	\$	385,697	\$	43,351	\$	429,048
					•		
	REFERENCES:						
	Column [A]: Line 1	Sch	edule CRM-4A	A, Column [A] Line 5 A, Column [F] Line 5			
•	Column [B]: Line 1	Sch	edule CRM-4A				
	Column [C]: Line 1	Sch					

MOUNT TIPTON WATER COMPANY Docket No. W-02105A-03-0303 Test Year Ended December 31, 2002

Schedule CRM 3A - 6

PLANT ADJUSTMENT #6, ELECTRIC PUMPING EQUIPMENT

LINE <u>NO.</u>		[A] COMPANY		;	[B] STAFF		[C] STAFF	
	<u>DESCRIPTION</u>	AS FILED		AS FILED ADJUST		<u>AD.</u>	JUSTED	
1	Electric Pumping Equipment	\$	104,325	\$	(85,262)	\$	19,063	
	REFERENCES:							
	Column [A]: Line 1	Sch	edule CRM-4A	n [A] Line 6				
	Column [B]: Line 1	Sch	edule CRM-4A	i, Columi	n [G] Line 6			
	Column [C]: Line 1	Schedule CRM-4A, Column [Y] Line 6						

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Schedule CRM 3A - 7

PLANT ADJUSTMENT #7, WATER TREATMENT EQUIPMENT

LINE <u>NO.</u>		[A] COMPANY		[B] STAFF			[C] STAFF
	DESCRIPTION	AS FILED		ADJUSTMENT		AD	JUSTED
1	Water Treatment Equipment	\$	-	\$	53,075	\$	53,075
		•					
	REFERENCES:						
	Column [A]: Line 1			A, Column [A] Line 7 A, Column [H] Line 7			
	Column [B]: Line 1	Sched	lule CRM-4.				
	Column [C]: Line 1	Schedule CRM-4A, Column [Y] Line 7					

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Test Year Ended December 31, 2002

Schedule CRM 3A - 8

PLANT ADJUSTMENT #8, DISTRIBUTION/RESERVOIRS AND STANDPIPE

DESCRIPTION	[A] COMPANY <u>AS FILED</u>		COMPANY		_				[C] STAFF JUSTED
Distribution/Reservoirs and Standpipe	\$	180,926	\$	24,565		\$	205,491		
•									
REFERENCES:									
Column [A]: Line 1	Schedule CRM-4A, Column [A] Line 8								
Column [B]: Line 1 Column [C]: Line 1	Schedule CRM-4A, Column [I] Line 8 Schedule CRM-4A. Column [Y] Line 8								
	Distribution/Reservoirs and Standpipe REFERENCES: Column [A]: Line 1 Column [B]: Line 1	DESCRIPTION A Distribution/Reservoirs and Standpipe \$ REFERENCES: Column [A]: Line 1 Sch Column [B]: Line 1 Sch	DESCRIPTION DESCRIPTION AS FILED Distribution/Reservoirs and Standpipe \$ 180,926 REFERENCES: Column [A]: Line 1 Schedule CRM-4/4 Column [B]: Line 1 Schedule CRM-4/4	DESCRIPTION AS FILED ADJU Distribution/Reservoirs and Standpipe \$ 180,926 \$ REFERENCES: Column [A]: Line 1 Column [B]: Line 1 Schedule CRM-4A, Column Schedule CRM-4A, Column	DESCRIPTION DESCRIPTION DESCRIPTION AS FILED ADJUSTMENT AS FILED ADJUSTMENT 180,926 \$ 24,565 REFERENCES: Column [A]: Line 1 Column [B]: Line 1 Schedule CRM-4A, Column [A] Line 8 Schedule CRM-4A, Column [I] Line 8	DESCRIPTION COMPANY STAFF ADJUSTMENT Distribution/Reservoirs and Standpipe \$ 180,926 \$ 24,565 REFERENCES: Column [A]: Line 1 Schedule CRM-4A, Column [A] Line 8 Column [B]: Line 1 Schedule CRM-4A, Column [I] Line 8	COMPANY STAFF AS FILED ADJUSTMENT AD Distribution/Reservoirs and Standpipe \$ 180,926 \$ 24,565 \$ REFERENCES: Column [A]: Line 1 Schedule CRM-4A, Column [A] Line 8 Column [B]: Line 1 Schedule CRM-4A, Column [I] Line 8		

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Test Year Ended December 31, 2002

Schedule CRM 3A - 9

PLANT ADJUSTMENT #9, TRANSMISSION AND DISTRIBUTION MAINS

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		COMPANY		[B] STAFF <u>ADJUSTMENT</u>		STAFF		COMPANY ST.		*		COMPANY STAFF			[C] STAFF <u>ADJUSTED</u>	
1	Transmission and Distribution Mains	\$	513,191	\$	165,220	\$	678,411											
	REFERENCES:					÷												
	Column [A]: Line 1	Schedule CRM-4A, Colu			Column [A] Line 9													
	Column [B]: Line 1	Schedule CRM-4A, Column [J] Line 9					÷											
	Column [C]: Line 1	Schedule CRM-4A, Column [Y] Line 9																

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Test Year Ended December 31, 2002

Schedule CRM 3A - 10

PLANT ADJUSTMENT #10, SERVICES

LINE <u>NO.</u>	NO.		[A] COMPANY		[B] STAFF		[C] STAFF
	DESCRIPTION	<u>AS FILED</u>		ADJ	<u>ADJUSTMENT</u>		JUSTED
1	Services	\$	96,205	\$	(29,012)	\$	67,193
	REFERENCES:	h	-				
	Column [A]: Line 1	Sch	edule CRM-4	۸, Columı	n [A] Line 10		
	Column [B]: Line 1	Sch	edule CRM-4/	۸, Columi	n [K] Line 10		
	Column [C]: Line 1	Sch	edule CRM-4A	م, Columi	n [Y] Line 10		

Schedule CRM 3A - 11

PLANT ADJUSTMENT #11, METERS

LINE <u>NO.</u>			[A] COMPANY <u>AS FILED</u>		[B] STAFF ADJUSTMENT		[C] STAFF <u>JUSTED</u>
1	Meters	\$	79,613	\$	(9,906)	\$	69,707
	REFERENCES:			٠			
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Schedule CRM-4A, Column [A] Line 1 Schedule CRM-4A, Column [L] Line 1 Schedule CRM-4A, Column [Y] Line 1					

Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 3A - 12

PLANT ADJUSTMENT #12, HYDRANTS

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		COMPANY STAFF		COMPANY				COMPANY STAFF		COMPANY STAFF		ST	C] AFF JSTED
1	Hydrants	\$	1,230	\$	(1,230)	\$	-								
	REFERENCES:														
	Column [A]: Line 1 Column [B]: Line 1		edule CRM-4/ edule CRM-4/		• •										
	Column (C1: Line 1	Sche	dule CRM-4A	A. Column	YI Line 12										

Schedule CRM 3A - 13

PLANT ADJUSTMENT #13, OTHER PLANT - STRUCTURE & IMPROVEMENTS

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED		[B] STAFF ADJUSTMENT		STAFF S		ST.	C] AFF ISTED
1	Other Plant - Structure & Improvements	\$	658,934	\$	(657,936)	\$	998		
	REFERENCES:				·				
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Sch	edule CRM-4A, edule CRM-4A, edule CRM-4A,						

Schedule CRM 3A - 14

PLANT ADJUSTMENT #14, OFFICE FURNITURE AND FIXTURES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED		[B] STAFF ADJUSTMENT		[C] STAFF ADJUSTED		
	<u> </u>	2.13		<u>, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	<u> </u>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
1	Office Furniture and Fixtures	\$	21,889	\$	(5,282)	\$	16,607	
	REFERENCES:							
	Column [A]: Line 1	Schedule CRM-4A, Column [A] Line 14						
	Column [B]: Line 1		edule CRM-4/		• •			
	Column [C]: Line 1		edule CRM-4A					

MOUNT TIPTON WATER COMPANY Docket No. W-02105A-03-0303

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Schedule CRM 3A - 15

PLANT ADJUSTMENT #15, TRANSPORTATION EQUIPMENT

LINE <u>NO.</u>	DESCRIPTION		COMPANY STAFF		COMPANY STAFF		[C] STAFF JUSTED
1	Transportation Equipment	\$ 24,	540 \$	4,131	\$ 28,671		
	REFERENCES:						
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Schedule Schedule Schedule					

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Test Year Ended December 31, 2002

Schedule CRM 3A - 16

PLANT ADJUSTMENT #16, TOOLS AND WORK EQUIPMENT

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		COMPANY STA		[B] STAFF <u>ADJUSTMENT</u>		COMPANY STAFF		COMPANY STAFF		COMPANY STAFF			[C] TAFF IUSTED
1	Tools and Work Equipment	\$	6,274	\$	3,014	\$	9,288								
•	REFERENCES:														
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Schedule CRM-4A, Column [A] Line 16 Schedule CRM-4A, Column [Q] Line 16 Schedule CRM-4A, Column [Y] Line 16													

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Test Year Ended December 31, 2002

Schedule CRM 3A - 17

PLANT ADJUSTMENT #17, POWER OPERATED EQUIPMENT

LINE <u>NO.</u>			[A] COMPANY		[B] STAFF		[C] [AFF	
	DESCRIPTION	AS FILED		ADJU:	STMENT	ADJUSTED		
1	Power Operated Equipment	\$	- ,	. \$	167	\$	167	
	REFERENCES:							
	Column [A]: Line 1		ule CRM-4	•] Line 18			
	Column [B]: Line 1	Sched	ule CRM-4	A, Column	[R] Line 18			
	Column [C]: Line 1	Sched						

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Test Year Ended December 31, 2002

Schedule CRM 3A - 18

PLANT ADJUSTMENT #18, MISCELLANEOUS EQUIPMENT

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF <u>ADJUSTE</u>	
[*] 1	Miscellaneous Equipment	\$	-	\$	8,464	\$	8,464
	REFERENCES:						
	Column [A]: Line 1 Column [B]: Line 1	Sched Sched					
	Column [C]: Line 1	Sched					

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Test Year Ended December 31, 2002

Schedule CRM 3A - 19

PLANT ADJUSTMENT #19, OTHER TANGIBLE EQUIPMENT

LINE <u>NO.</u>	[A] COMPANY DESCRIPTION <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] TAFF <u>USTED</u>	
1	Other Tangible Equipment	\$	7,873	\$	(6,665)	\$ 1,208
	REFERENCES:	•				
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Sche	edule CRM-4, edule CRM-4, edule CRM-4,	A, Column	T] Line 21	

MOUNT TIPTON WATER COMPANY Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 3A - 20

PLANT ADJUSTMENT #20, ACCUMULATED DEPRECIATION

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY DESCRIPTION AS FILED		COMPANY STAFF		[C] STAFF DJUSTED
1	Accumulated Depreciation	\$ 539,418	\$	327,615	\$	867,033
	REFERENCES:				*	
	Column [A]: Line 1	Schedule CRM-4A	, Colum	n [A] Line 23		
	Column [B]: Line 1	Schedule CRM-4A	A, Column [U] Line 23			
	Column (C): Line 1	Schedule CRM-4A	n IYI Line 23			

Schedule CRM 3A - 21

RATE BASE ADJUSTMENT #21 - CIAC and ACCUMULATED AMORTIZATION OF CIAC

LINE <u>NO.</u>	DESCRIPTION		[A] OMPANY S FILED		[B] STAFF JUSTMENT	[C] STAFF DJUSTED	
1	CIAC and Accumulated Amortization of CIAC	\$	347,002	\$	(192,278)	\$ 154,724	
	REFERENCES:						
	Column [A]: Line 1	Sch	edule CRM-4	A, Col	umn [A] Line 25		
	Column [B]: Line 1	Sch	edule CRM-4	A, Col	umn [V] Line 26		
	Column [C]: Line 1	Sch	edule CRM-4	A. Col	umn [Y] Line 27		

MOUNT TIPTON WATER COMPANY Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 3A - 22

PLANT ADJUSTMENT #22, ADVANCES-IN-AID-OF-CONSTRUCTION

LINE NO.	DESCRIPTION	[A] COMPANY <u>AS FILED</u>	[B] STAFF <u>ADJUSTMENT</u>	[C] STAFF <u>ADJUSTED</u>
1	Advances-in-Aid-of-Construction	\$ 20,501	\$ (8,740)	\$ 11,761
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Schedule CRM-4A, Schedule CRM-4A, Schedule CRM-4A,	Column [W] Line 28	

Schedule CRM 3A - 23

PLANT ADJUSTMENT #23, METER DEPOSITS

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED			[B] STAFF		[C] STAFF	
	DESCRIPTION	A	5 FILED	ADJ	<u>IUSTMENT</u>	AD	JUSTED	
1	Meter Deposits	\$	61,036	\$	(33,214)	\$	27,822	
	REFERENCES:							
	Column [A]: Line 1	Sch	edule CRM-4A,	Column [A	\] Line 29			
	Column [B]: Line 1	Sch	edule CRM-4A,	Column [X	(] Line 29			
	Column [C]: Line 1	Schedule CRM-4A, Column [Y] Line 29						

Schedule CRM 3A - 24

PLANT ADJUSTMENT #24, CASH WORKING CAPITAL

LINE			[A]	[B]	[C]
<u>NO.</u>		CC	MPANY	STAFF	STAFF
	DESCRIPTION	<u>A</u> 9	S FILED	ADJUSTMENT	<u>ADJUSTED</u>
1	Cash Working Capital	\$	26,418	\$ (9,629)	\$ 16,789

Column [A]: Line 1	Schedule CRM-4A, Column [A] Line 32
Column [B]: Line 1	Schedule CRM-4A, Column [X] Line 32
Column [C]: Line 1	Schedule CRM-4A, Column [Y] Line 32

Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

RATE BASE ADJUSTMENT #24 - CASH WORKING CAPITAL ALLOWANCE

		[A]		[B]	[C]	[D]	[E]
LINE							
NO.	DESCRIPTION	<u>AMOUNTS</u>					
1	Total Operating Expenses		\$	247,962			
2	Less:						
3	Income Taxes	-					
4	Property Taxes	18,093					
5	Other Taxes	7,185					
6	Depreciation Before CIAC	53,094					•
7	Amortization of CIAC	17350					
	Purchased Water	-					
9	Purchased Pumping Power	26,893					
10			<u>\$</u>	122,615			
11	Expenses - Other (L1 - L9)	~			\$ 125,347		
12	One-eighth			,	0.125		
13	Sub-total (L10 * L11)					\$ 15,668	
14	Purchased Water		\$	-			
15	Purchased Pumping Power			26,893			
16	Sub-total (L14 * L15)			•	\$ 26,893		
17	One-twenty-fourth			•	0.04167		
18	Sub-total (L16 * L17)					1,121	
19	Cash Working Capital Allowance - Staff	(L13+ L18)		•			\$ 16,789
20	Cash Working Capital Allowance - Com	pany					26,418
21	Staff's Adjustment						(9,629)

REFERENCES:

Lines 1 through 9: Schedule CRM-9 Line12 and 17: Testimony, CRM Line 20: Company Schedule B-5 Line 21: Line 19 - Line 20

OPERATING INCOME - TEST YEAR AND STAFF PROPOSED

			[A]		[B]	;	[C] STAFF		[D]		(E)
		C	OMPANY		STAFF		ST YEAR	5	TAFF		
LINE	•	TE	ST YEAR		ST YEAR		AS		OPOSED	;	STAFF
<u>NO.</u>	DESCRIPTION	Α	S FILED	<u>ADJI</u>	<u>JSTMENTS</u>	<u>AD</u>	DJUSTED	<u>CH</u>	ANGES	RECO	MMENDED
	REVENUES:										
1	Metered Water Sales	S	231,276	\$	7,002	\$	238,278	\$	29,225	\$	267,503
2	Standpipe	•	41,098	•		Ψ	41,098	Ψ	25,019	•	66,117
3	Regulators and Other Income		22,824		(21,000)		1,824		-		1,824
4	Other Operating Revenue				-				-		-
5	Total Operating Revenues	\$	295,198	\$	(13,998)	\$	281,200	\$	54,244	\$	335,444
	EXPENSES:										
6	Utility Expense	\$	26,893	\$		\$	26,893	\$	-	\$	26,893
7	Repairs and Maintenance	*	49,271	•	(45,137)	. *	4,134	*		•	4,134
8	Wages		76,963		9,405		86,368		-		86,368
9	Water Testing/analysis		1,490		2,598		4,088		-		4,088
10	Engineering/Survey		9,073		(9,073)		.,000		_		.,
11	Advertising		2,120		(2,120)		_		_		_
12	Loan Origination Fees		11,642		(11,642)		-		_		
13			18,387		(18,387)		-		-		-
	Bank Service Charges Dues and Publications				(10,307)		443		-		442
14			113		-		113	•	-		113
15	Fuel and Oil		2,376		-		2,376		-		2,376
16	Insurance-General		12,697		-		12,697		-		12,697
17	Insurance-Vehicle		1,317		-		1,317		-		1,317
18	Workers Compensation		1,000		-		1,000		-		1,000
19	Legal and Accounting		4,975		-		4,975		-		4,975
20	Auto and truck Expense		3,402		-		3,402		•		3,402
21	Equipment Rental		109		-		109		-		109
22	System Inspection		700		(700)		-		-		-
23	Travel		888		-		888		•		888
24	Seminars		51		-		51		-		- 51
25	Contributions		80		(80)		-		-		· -
26	Maps		184		(184)		•		_		-
27	Ouside Services		595		(595)		-				
28	Rate application expense		8,000		(5,333)		2,667		-		2,667
29	Land Lease		3,805		(3,097)		708				708
30	Less - allocated to Maintenance		(3,097)		3,097		-				•
31	Supplies- Office		7,485		(2,204)		5,281		_		5,281
32	Building Supplies		102		(2,204)		102		_		102
33	Payroll taxes		6,665		58		6,723		_		6,723
34	Unemployment taxes		1,472		(1,030)		442		_		442
35	Taxes-Real Estate		19,655		(1,562)		18,093				18,093
36	Taxes-Other		20		(1,302)		20		_		20
					-				•		
37	Telephone		5,617		-		5,617		-		5,617
38	Uniforms		490		- (00 70Å)		490		-		490
39	Consulting		32,739		(32,739)		-		-		-
40	Postage		3,139		-		3,139		-		3,139
41	Well Maitnenance Materials		3,097		•		3,097		· -		3,097
42	Meals		78		<u>-</u>		78		•		78
43	Management Consultant		6,200		(6,200)		•		-		-
44	Income Taxes		-		-		-				
45	Depreciation		67,956		(14,862)		53,094	****	-		53,094
46	Total Operating Expenses	\$	387,748	\$	(139,787)	\$	247,962		•	_\$	247,962
46	Operating Income (Loss)	\$	(92,550)	\$	125,789	\$	33,238	\$	54,244	\$	87,482

References:
Column (A): Company Schedule C-1
Column (B): Schedule CRM-10
Column (C): Column (A) + Column (B)
Column (D): Schedules CRM-1
Column (E): Column (C) + Column (D)

Schedule CRM-4A

LINE NO. DESCRIPTION	COMPANY AS FILED	ADJ#1	AD3 #2	ADJ #3	ABJ #4	ADJ#5	ADJ#6	ADJ #7	ADJ#8	, e# row	ADJ#10 A	ADJ#11 AI	ADJ#12 AI	ADJ#13 AC	AD3#14 AD	AD1#15 AD	ADJ#16 ADJ	ADJ#17 AD	ADJ#18 AD	ADJ#19 AG	ADJ #20 At	ADJ#21 ADJ	#22 ADJ# 23	3 ADJUSTED
REVENUES: Meterad Water Sales	\$ 231.276	\$ 7.002	,						•		•	•	•	•	•	*			••	-	-	•	-	\$ 238,276
2 Standpipes	41,098		[.													1	-	-	•	•	+	1		+
3 Regulators and Other Income 4 Other Operating Revenue	22,624		(21,000)			1.			1								. .							
Total Operating Revenues	\$ 295,198	\$ 7,002	\$ (21,000)					\vdash		\$	•	••	•	•		•		•	••	•	*	•	-	\$ 281,200
EXPENSES																								
Ulility Expense	\$ 26,893					•				•	•	-	•	•	•	•		•	5	•	-	•	•	\$ 26,693
Repairs and Maintenance	49,271			(45,137)				-	1	•	-		-	-			1	-	1	-	-	-		1
Wages	76.963				9.405		•		+	,	-		-	-	1	1		1	-	1		1		90.350
9 Water Testing/anglysis	1.490	+		•		2,586		-	+			1		+	-		-		-				ļ	1
Engineering/survey	5/0/6	1			-		3.073)		+			1	-		-	1			-	-				ļ
Advertising	2,120	•	1	-		•	1	(2,120)	-		•	•	-	+	1	-		1	1	·	-			1
Loan origination fees	11.642	†		1		1	1		11,0421	748 2871			1	-			 -							-
Bank service charges	16.35/		•	•	-	•	1	+	+	110,001														-
Dues and Publications	2112	1	•	•		1			+					1									 -	2376
15 ruel and Cil	4,370							+	+			1			1	1					-			-
surance-General	1 247	•		-			†		 	-											ļ.	-	 -	1.317
40 Market Committee	000				1		†	1				-						<u> </u>	ļ.	ļ.			· -	-
10 lead and Accession	4 075					1.		-		ļ.			ļ.	<u> </u>	ļ.				<u> </u>		,		ľ	4,975
And and Think extense	3 402				1		ŀ	- -				ļ.	ļ.								-			3,402
nioment rental	904						†.	-		-			ļ.,									ŀ	,	
System inspection	7007	ļ.			ļ.					-	(200)	<u> </u>	ļ.		<u> </u>		,		<u> </u>		-			
Travel	368							-		-		L	-		ļ.	ļ.			-					
Seminars	50								·															
Contributions	90						- -			-		(90)	•		-					,	·	-		
Maps	184										•		(184)				•			-				
Outside services	595						-	-						(595)								-		
Rate application expense	8,000					7	•	•			•		•		(5,333)						•	•		2.667
d lease	3,805			•	•		-	•	•		•	-	-			(3,097)	-	-	•	•	•			
30 Less-allocated to maintenance	(3,097)							-	-			•	•		·	-	3,097	•	•			·	-	
Supplies-Office	7,485														_		_	(2,204)						5.281
iding supplies	102					ľ	-									L								
33 Payroll taxes	6.665						-								_				95					6,723
employment taxes	1,472																			(1,030)				
35 Taxes-real estate	19,655																				(1,582)			=
Taxes-other	2						-							-				-						R
lephone	5,617								4															-
forms	490																-						1	
nsulting	32,739													1			1		1]	(32,739)		
40 Postage	3,138	+	1	1	1	1	1	+	+	1	1	1	1	+	+	+	1	+	+	+	+	1	1	3,138
41 Well Maintenance Materials	3.097	1	1		1	1		+	1	1	1	1	+	1	+	$\frac{1}{1}$	1	+	+		1			1
Meds	7.0	1	1	1	1	1	1	+	+	1	1	1	1	_	+	1	1			+	+	ľ	1000	-
magement Consulation	6,200									-		1		-		-		-		1			(6,200)	١
44 Depreciation	67,956	•			•	-	•	-	-	-	•	<u> </u> -	<u> </u>	 -	 -	<u> </u>	 -			-			(14,062)	23,094
												_												
			•			_	•						_											
45 Total Operating Expenses	\$ 387,749			\$ (45,137) \$ 9,405		\$ 2,598	\$ (9.073)	\$ (2,120)	\$ (11,642) \$	\$ (18,387) \$	\$ (002)	\$ (09)	(194) \$	(282)	(5,333) \$	(3,097)	3,097 \$ ((2,204) \$	Se Se	\$ (1,030) \$	(1.562) \$ ((32,739) \$ (6	(6,200) \$ (14,862)	23 \$ 247,961
								-		_	_		_		-			_						_

_	#FOY		References:
	₽	Consulting/Wages	Schedule CRM4
	2	Management Consultation	Schedule CRM-
_	7	Depreciation	Schedule CRM4
_	z	Land Lease	Schedule CRM-
_	R	Less-allocated to Maintenance	Schedule CRM-

M-6-19 M-6-20 M-6-21 M-8-22 M-8-22

*****>>

1864 1864 187

Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 4A-1

OPERATING ADJUSTMENT #1 - METERED WATER SALES

LINE <u>NO.</u>			[A] DMPANY	_	[B] TAFF		[C] STAFF
1 Meter	DESCRIPTION red Water Sales	<u>A</u> \$	<u>S FILED</u> 231,276	ADJU \$	<u>STMENT</u> 7,002	<u>AL</u> \$	238,278

Column [A]: Line 1	Schedule CRM-6A, Column [A] Line 1
Column [B]: Line 1	Schedule CRM-6A, Column [B] Line 1
Column [C]: Line 1	Schedule CRM-6A, Column [C] Line 1

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Schedule CRM 4A-2

OPERATING ADJUSTMENT #2 - REGULATORS & OTHER INCOME

LINE		CC	[A] MPANY	[B] STAFF	c	[C]
<u>NO.</u>	DESCRIPTION		S FILED	<u>USTMENT</u>	-	JUSTED
1	Regulators & Other Income	\$	22,824	\$ (21,000)	\$	1,824

Column [A]: Line 1	Schedule CRM-6A, Column [A] Line 3
Column [B]: Line 1	Schedule CRM-6A, Column [B] Line 3
Column [C]: Line 1	Schedule CRM-6A, Column [C] Line 3

Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 4A-3

OPERATING ADJUSTMENT #3 - REPAIRS AND MAINTENANCE

LINE			[A]		[B]		[C]
NO.		С	OMPANY		STAFF		STAFF
	DESCRIPTION	E	AS FILED	<u>ADJ</u>	<u>USTMENT</u>	<u>A</u> [<u>DJUSTED</u>
1	Repairs and Maintenance	\$	49,271	\$	(45,137)	\$	4,134

Column [A]: Line 1	Schedule CRM-6A, Column [A] Line 7
Column [B]: Line 1	Schedule CRM-6A, Column [B] Line 7
Column [C]: Line 1	Schedule CRM-6A, Column [C] Line 7

Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 4A-4

OPERATING ADJUSTMENT #4 - WAGES

LINE NO.	DESCRIPTION	[A] COMPANY <u>AS FILED</u>	[B] STAFF <u>ADJUSTMENT</u>	[C] STAFF <u>ADJUSTED</u>	
1 Wages		\$ 76,963	\$ 9,405	\$ 86,368	

REFERENCES:

Column [A]: Line 1 Schedule CRM-6A, Column [A] Line 8
Column [B]: Line 1 Schedule CRM-6A, Column [B] Line 8
Column [C]: Line 1 Schedule CRM-6A, Column [C] Line 8

Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 4A-5

OPERATING ADJUSTMENT #5 - WATER TESTING/ANALYSIS

LINE <u>NO.</u>		[A] COMPANY		[B] STAFF		[C] STAFF	
	DESCRIPTION	<u>AS</u>	FILED	<u>ADJL</u>	JSTMENT	AD.	JUSTED
1	Water Testing/Analysis	\$	1,490	\$	2,598	\$	4,088

Column [A]: Line 1	Schedule CRM-6A, Column [A] Line 9
Column [B]: Line 1	Schedule CRM-6A, Column [B] Line 9
Column [C]: Line 1	Schedule CRM-6A, Column [C] Line 9

Schedule CRM 4A-6

OPERATING ADJUSTMENT #6 - ENGINEERING/SURVEY

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF <u>ADJUSTED</u>	
1	Engineering/Survey	\$	9,073	\$	(9,073)	\$	-
	REFERENCES:						
~	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Sched	dule CRM-6A, dule CRM-6A, dule CRM-6A,	Column	[B] Line 10		

Schedule CRM 4A-7

OPERATING ADJUSTMENT #7 - ADVERTISING EXPENSE

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF <u>ADJUSTED</u>	
1	Advertising Expense	\$	2,120	\$	(2,120)	\$	-

Column [A]: Line 1	Schedule CRM-6A, Column [A] Line 11
Column [B]: Line 1	Schedule CRM-6A, Column [B] Line 11
Column [C]: Line 1	Schedule CRM-6A, Column [C] Line 11

Schedule CRM 4A-8

OPERATING EXPENSE #8 - LOAN ORIGINATION FEES

LINE NO. DES	CRIPTION		[A] MPANY S FILED		[B] STAFF <u>USTMENT</u>	ST	C] AFF ISTED
1 Loan Origination	Fees	\$	11,642	\$	(11,642)	\$	-
REFERENCES:	•						
Column [A]: Line Column [B]: Line Column [C]: Line	1	Sche	edule CRM-6/ edule CRM-6/ edule CRM-6/	A, Colum	n [B] Line 12		

Schedule CRM 4A-9

OPERATING ADJUSTMENT #9 - BANK SERVICE CHARGES

LINE NO.	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF <u>ADJUSTED</u>	
1	Bank Service Charges	\$	18,387	\$	(18,387)	\$	-
	REFERENCES:						
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Sche	edule CRM-6A, edule CRM-6A, edule CRM-6A,	Columi	n [B] Line 13		

Schedule CRM 4A-10

OPERATING ADJUSTMENT #10 - SYSTEM INSPECTION

LINE <u>NO.</u>	<u>DESCRIPTION</u>	[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF <u>ADJUSTED</u>	
1	Systems Inspection	\$	700	\$	(700)	\$	-

Column [A]: Line 1	Schedule CRM-6A, Column [A] Line 22
Column [B]: Line 1	Schedule CRM-6A, Column [B] Line 22
Column [C]: Line 1	Schedule CRM-6A, Column [C] Line 22

Schedule CRM 4A-11

OPERATING ADJUSTMENT #11 - CONTRIBUTIONS

LINE NO.	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF <u>ADJUSTED</u>		
1	Contributions	\$	80	\$	(80)	\$	-	
	REFERENCES:							
·	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Schedule CRM-6A, Column [A] Line 25 Schedule CRM-6A, Column [B] Line 25 Schedule CRM-6A, Column [C] Line 25						

Schedule CRM 4A-12

OPERATING ADJUSTMENT #12 - MAP

LINE NO.			[A] IPANY FILED	[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF <u>ADJUSTED</u>	
1 MAP		\$	184	\$	(184)	\$	-

Column [A]: Line 1	Schedule CRM-6A, Column [A] Line 26
Column [B]: Line 1	Schedule CRM-6A, Column [B] Line 26
Column [C]: Line 1	Schedule CRM-6A, Column [C] Line 26

Schedule CRM 4A-13

OPERATING ADJUSTMENT #13 - OUTSIDE SERVICES

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF ADJUSTED	
, 1	Outside Services	\$	595	\$	(595)	\$	-
	REFERENCES:						
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Schedule CRM-6A, Column [A] Line 27 Schedule CRM-6A, Column [B] Line 27 Schedule CRM-6A, Column [C] Line 27					

Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 4A-14

OPERATING ADJUSTMENT #14 - RATE APPLICATION EXPENSE

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		[B] STAFF ADJUSTMENT		[C] STAFF <u>ADJUSTED</u>	
1	Rate Application Expense	\$	8,000	\$	(5,333)	\$	2,667
	REFERENCES:						
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Schedule CRM-6A, Column [A] Line 28 Schedule CRM-6A, Column [B] Line 28 Schedule CRM-6A, Column [C] Line 28					

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Schedule CRM 4A-15

OPERATING ADJUSTMENT #15-LAND LEASE

LINE NO.			[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF <u>ADJUSTED</u>	
1 La	and Lease	\$	8,000	\$	(5,333)	\$	2,667	

Column [A]: Line 1	Schedule CRM-6A, Column [A] Line 29
Column [B]: Line 1	Schedule CRM-6A, Column [B] Line 29
Column [C]: Line 1	Schedule CRM-6A, Column [C] Line 29

Schedule CRM-4A-16

OPERATING ADJUSTMENT #16 - LESS ALLOCATED TO MAINTENANCE

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF <u>ADJUSTEL</u>	
1	Less Allocated to Maintenance	\$	(3,097)	\$	3,097	\$	-
	REFERENCES:						
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Schedule CRM-6A, Column [A] Line 30 Schedule CRM-6A, Column [B] Line 30 Schedule CRM-6A, Column [C] Line 30					

Schedule CRM 4A-17

OPERATING ADJUSTMENT #17 - SUPPLIES - OFFICE

LINE <u>NO.</u>		[A] COMPANY		[B] STAFF		[C] STAFF	
	DESCRIPTION	<u>AS</u>	FILED	<u>ADJI</u>	<u>JSTMENT</u>	<u>AD</u>	JUSTED
1	Supplies - Office	\$	7,485	\$	(2,204)	\$	5,281
			ı				
	REFERENCES:						
	Column [A]: Line 1		dule CRM-6A				
	Column [B]: Line 1	Sche	dule CRM-6A	A, Columr	n [B] Line 31		
	Column IC1: Line 1	Sche	dule CRM-6A	A. Column	n [C] Line 31		

Schedule CRM 4A-18

OPERATING ADJUSTMENT #18 - PAYROLL TAXES

LINE <u>NO.</u>	DESCRIPTION		[A] MPANY FILED	[B] STAFF <u>ADJUSTMENT</u>		[C] STAFF <u>ADJUSTED</u>	
1	Payroll Taxes	\$	6,665	\$	58	\$	6,723
	REFERENCES:					•	
	Column [A]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Sche	dule CRM-6/dule CRM-6/dule CRM-6/	م, Column [ا	B] Line 33		

MOUNT TIPTON WATER COMPANY

Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 4A-19

OPERATING ADJUSTMENT #19 - UNEMPLOYMENT TAXES

LINE <u>NO.</u>		[A] COMPANY			[B] TAFF	[C] STAFF	
	DESCRIPTION	<u>AS FILED</u>		<u>ADJUSTMENT</u>		ADJUSTED	
1	Unemployment Taxes	\$	1,472	\$	(1,030)	\$	442
					•		
	REFERENCES:						
	Column [A]: Line 1		lule CRM-6A,				
	Column [B]: Line 1		lule CRM-6A,	• •			
	Column [C]: Line 1	Scried	lule CRM-6A,				

MOUNT TIPTON WATER COMPANY

Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 46A-20

OPERATING ADJUSTMENT #20- TAXES REAL ESTATE

LINE <u>NO.</u>	DESCRIPTION		[A] MPANY S FILED	_	[B] STAFF JSTMENT	[C] STAFF JUSTED
1	Staff adjusted Test Year Revenues					\$ 281,200
2	Weight Factor					2
3	Subtotal (Line 1 X Line 2)					\$ 562,400
4	Staff Recommended Revenue					\$ 335,739
5	Subtotal (Line 3 + Line 4)					\$ 898,139
6	Number of Years					3
7	Three Year Average (Line 5/ Line 6)					\$ 299,380
8	Department of Revenue Multiplier					2
9	Revenue Base Value (Line 7 X Line 8)					\$ 598,759
10	Plus: 10% of 2002 CWIP					\$ _
11	Less: Net Book Value of Licenced Vehicles					\$ -
12	Full Cash Value (Line 9 + Line 10 - Line 11)					\$ 598,759
13	Assessment Ratio					0.25
14	Assessed Value (Line 12 X Line 13)					\$ 149,690
15	Composite Property Tax Rate					0.120867
16	Staff proposed Property Tax Expense (Line 14 X Line 15)	\$	19,655	\$	(1,562)	\$ 18,093
		_				

REFERENCES:

Column [A]: Line 16	Schedule CRM-6A, Column [A] Line 34
Column [B]: Line 16	Schedule CRM-6A, Column [B] Line 34
Column [C]: Line 16	Schedule CRM-6A, Column [C] Line 34

MOUNT TIPTON WATER COMPANY

Docket No. W-02105A-03-0303

Test Year Ended December 31, 2002

Schedule CRM 4A-21

OPERATING ADJUSTMENT #21 - CONSULTING / WAGES

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>			[B] STAFF USTMENT	[C] STAFF <u>ADJUSTED</u>	
1	Consulting	\$	32,739	\$	(32,739)	\$	-
	REFERENCES:						
	Column [Å]: Line 1 Column [B]: Line 1 Column [C]: Line 1	Sch	edule CRM-6A, (edule CRM-6A, (edule CRM-6A, (n [B] Line 55			

MOUNT TIPTON WATER COMPANY Docket No. W-02105A-03-0303 Test Year Ended December 31, 2002

tet No. W-02105A-03-0303 Schedule CRM 4A-22

OPERATING ADJUSTMENT # 22 - MANAGEMENT CONSULTANT

LINE NO.	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		_	[B] TAFF <u>STMENT</u>	[C] STAFF <u>ADJUSTED</u>				
1	Management Consultant	\$	6,200	\$	(6,200)	\$	-			
	REFERENCES:			,						
	Column [A]: Line 1	Sched	ule CRM-6A,	Column	[A] Line 59					
	Column [B]: Line 1	Schedule CRM-6A, Column [B] Line 59								
	Column (C1: Line 1	Schedule CRM-6A, Column [C] Line 59								

MOUNT TIPTON WATER COMPANY Docket No. W-2105A-03-0303 Test Year Ended December 31, 2002

Column [A]: Line 1

Column [B]: Line 1

Column [C]: Line 1

Schedule CRM 4A-23

OPERATING ADJUSTMENT #23 - DEPRECIATION

LINE <u>NO.</u>	DESCRIPTION	[A] COMPANY <u>AS FILED</u>		[B] STAFF <u>USTMENT</u>	[C] STAFF <u>ADJUSTED</u>		
. 1	Depreciation	\$	67,956	\$ (14,862)	\$	53,094	
	REFERENCES:	-					

Schedule CRM-6A, Column [A] Line 60

Schedule CRM-6A, Column [B] Line 60

Schedule CRM-6A, Column [C] Line 60

RATE DESIGN

Minimum Monthly Charge		PRESENT		PRO	OSED RATES		
METER SIZE		RAT	res	CO	MPANY		STAFF
5/8 X 3/4-inch 3/4 - inch 1.0-inch 1.5-inch 2.0-inch 3.0-inch 4.0-inch 6.0-inch 8.0-inch	\$		18.00 25.00 27.00 50.00 70.00 90.00 100.00 200.00 300.00	****	22.50 31.25 33.75 62.50 87.50 112.50 125.00 250.00 375.00	***	19.00 28.50 47.50 95.00 152.00 285.00 475.00 950.00 1,425.00
Gallons included in the Minimum			1,000		-		0
Commodity Charge in Excess of Minimum - per 1,000 Gallons:	_						
From 1,001 gallons to 20,000 gallons From 20,001 gallons to 40,000 gallons Over 40,000 gallons Tier one all meter sizes up to 10,000 gallons Tier two all meter sizes from 10,001 gallons to 15,000 gallons Tier Three all meter sized from 15,001 gallons to 20,000 gallons Tier four all meter sizes from 20,001 gallons to 25,000 gallons Tier five all meter sizes from 25,001 gallons to 30,000 gallons Tier six all meter sizes all gallons over 30,000 gallons	\$ \$ \$ \$		1.80 2.35 3.00	55555	2.25 4.50 9.00 13.00 18.00 22.50		
For 5/8x3/4 inch meter size Tier one from zero galions to 4,000 galions Tier two 4001 galions to 9,000 galions Tier three all galions over 9,000 galions	_					\$ \$ \$	2.45 3.20 4.20
For 3/4-inch meter size Tier one from zero to 4,000 gallons Tier two 4,001 gallons to 15,000 gallons Tier three all gallons over 15,000 gallons	_					\$ \$ \$	2.45 3.20 4.20
For One inch meter size Tier one from zero gallons to 25,000 gallons Tier two all gallons over 25,000 gallons						\$ \$	3.20 4.20
For One and One half inch meter size Tier one from zero gallons to 70,000 gallons Tier two all gallons over 70,000 gallons	- .					\$ \$	3.20 4.20
For Two inch meter size Tier one from zero gallons to 125,000 gallons Tier two all gallon over 125,000 gallons						\$ \$	3.20 4.20
For Three inch meter size Tier one from zero gallons to 250,000 gallons Tier two all gallons over 250,000 gallons						\$ \$	3.20 4.20
For four inch meter Tier one from zero gallons to 400,000 gallons Tier two all gallons over 400,000 gallons	_					\$ \$	3.20 4.20
For Six inch meter size Tier one from zero gallons to 825,000 gallons Tier two all gallons over 825,000 gallons						\$ \$	3.20 4.20
For Eight inch meter size Tier one from zero gallons to 1,250,000 gallons Tier two all gallons over 1,250,000 gallons			,			\$ \$	3.20 4.20
Bulk Sales Commodity Charge: Per 1,000 gallons With assistance Without assistance	\$	}	3.08 5.00 3.00	e	6.05		
Residential use - per 1,000 gallons All bulk sales	·			\$	6.25	\$	4.20

RATE DESIGN

Off-site facilities hook-up fees					*		
Size factor:		Hook	-up fee:				
1 5/8x3/4-inch	 _	\$	700	\$	800	\$	800
12 3/4-inch		\$	840	\$	840	\$	840
2 1-inch		\$	1,400	\$	1,400	\$	1,400
4 11/2-inch		\$	2,800	\$	2,800	\$	2,800
6.4 2-inch			4,480	\$	4,480	\$	4,480
12 3-inch		Š	8,400	\$	8,400	\$	8,400
		\$ \$ \$	14,000	\$	14,000	\$	14,000
20 4-inch		\$	28,000	\$	28,000	\$	28,000
40 6-inch		φ	20,000	Ψ	20,000	Ψ	20,000
Service Line and Meter Installation Charges	<u> </u>	_			*		
Meter Size			sit Amount	_			400
5/8-inch x 3/4-inch		\$	350	\$	437.50	\$	438
3/4-inch		\$	370	\$	462.50	\$	462
1-inch		\$	450	\$	562.50	\$	562
11/2-inch		\$	670	\$	837.50	\$	838
2-inch		\$	875	\$	1,093.75	\$	1,094
3-inch		\$ \$	1,025	\$	1,281.25	\$	1,281
4-inch		\$	2,700	\$	3,375.00	\$	3,375
6-inch		\$	3,825	\$	4,781.25	\$	4,781
8-inch				\$	5,000.00	\$	5,000
Service Charges							
Establishment		\$	25.00	\$	25.00	\$	25.00
Establishment - (after hours)		. \$	40.00	\$	40.00	\$	40.00
Reconnect (Delinquent)		\$	40.00	\$	40.00	\$	40.00
Reconnection (After Hours)		\$ \$	40.00			\$	40.00
To send delinquent notice		\$	1.00				0.00
New service impacr fee		\$	40.00	\$1,	% of meter fee p 500 per 100 fee		0.00
		_			inline ext.	•	40.00
Meter test (If correct)		\$ \$	40.00	\$	40.00	\$	40.00
Meter Reread (If Correct)		\$	10.00	\$	10.00	\$	10.00
Non-sufficient Check Charge		\$	15.00	\$	15.00	\$	15.00
Deposit (security)	•		*		*		*
Security Interest (Per Annum)			6%		*		•
Late Pmt Penalty (Per Annum)		· .	10%			•	0.00
Deferred Payment - Monthly Rate			10%		***		. •
Deferred Pmt (Per Annum)			12%				0.00
Re-establishment (within 12 Months)			**		**		**
Re-establishment (after hours)				40	0.00 Plus **		0.00
Customer requested meter move					cost		0.00
Late charge per month					1.50%		***
Discharge charge (requested)) pro-rata plus		0.00
					thly minimum charge to apply		
Hourly charge (after hours service)		,		usaye	Cost Cost		0.00
Water line crossing paved road		•			Cost		0.00
					Cost		0.00
Charges emergency service not caused by company					Cost		0.00
Meter installation tampering					Cost		0.00
Line extension agreements							
6" mainline extension administrative cost					1,500.00		0.00
Cost for rock excavation (non-refundable)					Cost		0.00
Sprinkler rate					n/a		0.00
Master metering					n/a		0.00
Capitol maintenance charge				2.5% c	f monthly usage	•	0.00
Sprinkler rate							0.00
Deferred Pmt (per amun)							0.00
••							

Per Commissions Rules (R14-2-403.B)
 Months off system times the minimum (R14-2-403.D)
 1.50% of unpaid monthly balance

TYPICAL BILL ANALYSIS

General Service 5/8 - Inch Meter

Average Number of Customers:

740

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	5,548	\$28.69	\$45.21	\$16.52	57.6%
Median Usage	3,342	\$23.50	\$35.29	\$11.79	50.2%
Staff Proposed		-			
Average Usage	5,548	\$28.69	\$33.95	\$5.26	18.3%
Median Usage	3,342	\$23.50	\$27.35	\$3.85	16.4%

Present & Proposed Rates (Without Taxes) General Service 5/8 - Inch Meter

		Company		Staff	
Gallons	Present	Proposed	%	Proposed	%
Consumption	Rates	Rates	<u>Increase</u>	Rates	<u>Increase</u>
0	\$18.00	\$22.50	25.0%	\$19.00	5.6%
1,000	18.00	24.75	37.5%	21.50	19.4%
2,000	20.35	29.25	43.7%	24.00	17.9%
3,000	22.70	33.75	48.7%	26.50	16.7%
4,000	25.05	38.25	52.7%	29.00	15.8%
5,000	27.40	42.75	56.0%	32.20	17.5%
6,000	29.75	47.25	58.8%	35.40	19.0%
7,000	32.10	51.75	61.2%	38.60	20.2%
8,000	34.45	56.25	63.3%	41.80	21.3%
9,000	36.80	60.75	65.1%	45.00	22.3%
10,000	39.15	65.25	66.7%	49.20	25.7%
15,000	50.90	110.25	116.6%	70.20	37.9%
20,000	62.65	175.25	179.7%	91.20	45.6%
25,000	77.65	265.25	241.6%	112.20	44.5%
50,000	80.65	287.75	256.8%	217.20	169.3%
75,000	83.65	310.25	270.9%	322.20	285.2%
100,000	86.65	332.75	284.0%	427.20	393.0%
125,000	89.65	355.25	296.3%	532.20	493.6%
150,000	92.65	377.75	307.7%	637.20	587.7%

ACTUAL BILL ANALYSIS

General Service 5/8 X 3/4 - Inch Meter

Actual Usage Customer Bills randomly picked by the Company. 12 Months usage for 2003

High Consumer		Co		Staff			
	Actual	Presen	t Proposed	%	Proposed	%	
	Gallons	Rate	s Rates	Increase	Rates	Increase	
January	61,750	\$ 164.45	\$ 981.88	497.1%	\$ 271.50	65.1%	
February	66,220	137.20	\$ 1,082.45	689.0%	\$ 290.27	111.6%	
March	66,620	137.92	\$ 1,091.45	691.4%	\$ 291.95	111.7%	
April	70,690	145.24	\$ 1,183.03	714.5%	\$ 309.05	112.8%	
May	45,410	99.74	\$ 614.23	515.8%	\$ 202.87	103.4%	
June	76,030	154.85	\$ 1,303.18	741.6%	\$ 331.48	114.1%	
July	76,820	156.28	\$ 1,320.95	745.3%	\$ 334.79	114.2%	
August	59,330	124.79	\$ 927.43	643.2%	\$ 261.34	109.4%	
September	50,120	108.22	\$ 720.20	565.5%	\$ 222.65	105.7%	
October	62,560	130.61	\$ 1,000.10	665.7%	\$ 274.90	110.5%	
November	49,200	106.56	\$ 699.50	556.4%	\$ 218.79	105.3%	
December	51,350	110.43	\$ 747.88	577.2%	\$ 227.82	106.3%	
					•		
Total	736,100	\$ 1,576.28	\$11,672.25	640.5%	\$ 3,237.42	105.4%	
;							
Average Usage	61,342	\$ 131.36	\$ 972.69	640.5%	\$ 269.79	105.4%	

Low Consumer	Company						Staff Proposed Rates			
	Actual		Present		Proposed	%	8	Excluding	%	
_	Gallons		Rates		Rates	Increase	S	urcharge	Increase	
January	960	\$	19.73	\$	24.66	25.0%	\$	26.75	35.6%	
February	110		18.20	\$	22.75	25.0%	\$	24.67	35.6%	
March	190		18.34	\$	22.93	25.0%	\$	24.87	35.6%	
April	130		18.23	\$	22.79	25.0%	\$	24.72	35.6%	
May	610		19.10	\$	23.87	25.0%	\$	25.89	35.6%	
June	830		19.49	\$	24.37	25.0%	\$	26.43	35.6%	
July	920		19.66	\$	24.57	25.0%	\$	26.65	35.6%	
August	1,560		20.81	\$	26.01	25.0%	\$	28.22	35.6%	
September	1,410		20.54	\$	25.67	25.0%	\$	27.85	35.6%	
October	1,530		20.75	\$	25.94	25.0%	\$	28.15	35.6%	
November	660		19.19	\$	23.99	25.0%	\$	26.02	35.6%	
December	1,220		20.20	\$	25.25	25.0%	\$	27.39	35.6%	
Total	10,130	\$	234.23	\$	292.79	25.0%	\$	317.62	35.6%	
Average Usage	844	\$	19.52	\$	24.40	25.0%	\$	26.47	35.6%	



BEFORE THE ARIZONA CORPORATION COMMISSION

Chairman
WILLIAM A. MUNDELL
Commissioner
JEFF HATCH-MILLER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

MARC SPITZER

IN THE MATTER OF THE APPLICATION OF)	DOCKET NO. W-02105A-03-0303
MT. TIPTON WATER COMPANY, INC.,)	
AN ARIZONA CORPORATION, FOR A RATE)	
INCREASE)	

DIRECT TESTIMONY

OF

DOROTHY HAINS

UTILITIES ENGINEER

UTILITIES DIVISION

APRIL 16, 2004

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SCHEDULES
Engineering Report for Mt. Tipton Water CompanyEXHIBIT-1

Testimony of Dorothy Hains Docket No. W-02105A-03-0303 Page 3 INTRODUCTION 1 21 Q. Please state your name and business address. 3 Α. My name is Dorothy Hains. My business address is 1200 West Washington Street, Phoenix, 4 Arizona 85007. 5 6 Q. By whom and in what position are you employed? 7 A. I am employed by the Arizona Corporation Commission ("Commission") as a Utilities 8 Engineer - Water/Wastewater in the Utilities Division. 9 Q. How long have you been employed by the Commission? 10 11 A. I have been employed by the Commission since January 1998. 12 13 Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater? Among other responsibilities, I inspect, investigate and evaluate water and wastewater 14 A. 15 systems; obtain data, prepare reconstruction cost new and/or original cost studies, cost of 16 service studies and investigative reports; interpret rules and regulations; suggest corrective 17 action and provide technical recommendations on water and wastewater system deficiencies; and provide written and oral testimony on rates and other cases before the Commission. 18 19 20l Q. How many companies have you analyzed for the Utilities Division? 21 A. I have analyzed approximately 78 companies covering these various responsibilities for the Utilities Division. 22 23 24 Q. Have you previously testified before this Commission? Yes, I have testified before this Commission. 25 Α. 26 27 28

	Togtimo	ny of Dorothy Hains
		No. W-02105A-03-0303
1	Q.	What is your educational background?
2	A.	I graduated from Alabama University in Birmingham in 1987 with a Bachelor of Science
3		degree in Civil Engineering.
4		
5	Q.	Briefly describe your pertinent work experience.
6	A.	Prior to my employment with the Commission, I was an Environmental Engineer for the
7		Arizona Department of Environmental Quality, for ten years. Prior to that, I was an
8		Engineering Technician with C. F. Hains, Hydrology in Northport, Alabama for
9		approximately five years.
10		
11	Q.	Please state your professional membership, registrations, and licenses.
12	A.	I am a member of the American Society of Civil Engineering ("ASCE"). I am a registered
13		Civil Engineer in Arizona.
14		
15	PURP	OSE OF TESTIMONY
16	Q.	What was your assignment in this rate proceeding?
17	A.	My assignment was to provide Staff's engineering evaluation of the Mt. Tipton Water
18		Company ("Mt. Tipton" or "Company").
19		
20	Q.	What is the purpose of your testimony in this proceeding?
21	A.	To present the findings of Staff's engineering evaluation of Mt. Tipton's operation. Those
22		findings are contained in the Engineering Report that I have prepared for this proceeding.
23		This report is included as Exhibit-1, in this pre-filed testimony.
24		
25	•••	
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27		
28		

ENGINEERING REPORT

- Q. Would you briefly describe what was involved in preparing the Engineering Report for the water operations in this rate proceeding?
- A. After reviewing Mt. Tipton's rate application, I physically inspected the water system to evaluate its operations and to determine which plant items were or were not used and useful. I contacted the Arizona Department of Environmental Quality ("ADEQ") to determine if the system was in compliance with ADEQ requirements. I obtained information from Mt. Tipton regarding water testing and water usage and analyzed that information. Based on this data, I made my evaluations and prepared the Engineering Report attached as Exhibit-1.
- Q. Please describe the information contained in Exhibit-1.
- A. Exhibit-1 is the Engineering Report for Mt. Tipton's operation, this Report can be divided into three general sections: 1) Purpose of Report; 2) Discussions, and 3) Conclusions and Recommendations. The Discussions section can be further divided into ten subsections: A) Location of System; B) Description of System; C) Arsenic; D) Water Usage; E) Growth Projection; F) ADEQ Compliance; G) Arizona Department of Water Resources ("ADWR") Compliance; H) Arizona Corporation Commission ("ACC") Compliance; I) Water Testing Expenses; J) Depreciation Rates; and K) Others. These subsections provide information about Mt. Tipton system.

CONCLUSIONS AND RECOMMENDATIONS

- Q. What are Staff's conclusions and recommendations regarding Mt. Tipton's operation?
- A. Based upon Staff's engineering evaluation of Mt. Tipton's operation, Staff has concluded the following:
 - 1) The most recent lab analysis by the Company indicated that the arsenic levels in the Company's supply are below the new arsenic MCL;

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- 2) According to the Utilities Division Compliance Unit, the Company has no outstanding ACC compliance issues;
- 3) The Company is not in any ADWR Active Management Area.
- 4) Arizona Department of Environmental Quality ("ADEQ") has determined that Mt. Tipton Water Co ("Mt. Tipton" or "Company") is currently delivering water that meets water quality standards required by Arizona Administrative Code, title 18, Chapter 4.

Staff's recommendations are listed as follows:

- 1) Staff recommends that the Company use specific depreciation rates by the National Association of Regulatory Utility Commissioners ("NARUC") category;
- There is an average of 19.42 percent of non-account water determined in the system. 2) Staff recommends that the Company reduce its water loss to less than 10 percent within eighteen months after the effective date of the Decision in this matter. Staff further recommends that the Company file quarterly reports with the Director of the Utilities Division, indicating the quantity of water pumped and sold each month during the quarter and the efforts made to reduce water loss, such as number of leaks repaired, meters replaced, pipeline flushing, etc. These reports should be filed on a March 31st, June 30th, September 30th, and December 31st quarterly schedule. The first quarterly report should be filed within 120 days of the effective date of the Decision in this matter. Staff further recommends that the reporting may end, if the Company shows that average water loss for two consecutive quarters is below 10 percent. If after eighteen months of the effective date of the Decision in this matter the Company has failed to reduce its non-account water below 15 percent, Staff further recommends that any new Main Extension Agreements submitted by the Company should be denied until the Company shows that average water loss for two consecutive quarters is below 15 percent. If the Company finds that water loss can only be reduced to

less than 15 percent, but not less than 10 percent within eighteen months after the effective date of the Decision in this matter, the Company shall submit, by December 31, 2005, or prior to its next rate case whichever comes first, a detailed cost analysis and explanation demonstrating why a water loss reduction to less than 10 percent is not cost effective.

- Well No. 9 is not used and useful, due to bacteria infection. According to the well drilling log report in ADWR's database, the cost of drilling this well was \$4,900 in 1962. Staff estimates that the cost of the 3-HP pump was \$322 in 1962;
- 4) Water testing expenses are based upon participation in the ADEQ Monitoring Assistance Program. Annual testing expenses should be adjusted to \$ 4,088, the level described in Table 8 of the Engineering Report.
- 5) Staff recommends that the fire hydrants be removed from rate base as not used and useful.
- 6) Staff has no objection to the Company's proposal to increase its Hook-up Fee Charge for a 5/8 x 3/4 inch meter to \$800.

Q. Does this conclude your pre-filed testimony?

A. Yes, it does.

EXHIBIT 1

ENGINEERING REPORT FOR MT. TIPTON WATER COMPANY

BY DOROTHY HAINS

APRIL 16, 2004



Engineering Report
For Mt. Tipton Water Company
By Dorothy Hains
Docket No. W-02105A-03-0303
(Rate Application)

April 16, 2004

EXECUTIVE SUMMARY

Recommendations:

- 1. Staff recommends that the Company use specific depreciation rates by the National Association of Regulatory Utility Commissioners ("NARUC") category. (See §K and Exhibit 6 for a discussion and a tabulation of the recommended rates.)
- 2. There is an average of 19.42 percent of non-account water determined in the system. Staff recommends that the Company reduce its water loss to less than 10 percent within eighteen months after the effective date of the Decision in this matter. Staff further recommends that the Company file quarterly reports with the Director of the Utilities Division, indicating the quantity of water pumped and sold each month during the quarter and the efforts made to reduce water loss, such as number of leaks repaired, meters replaced, pipeline flushing, etc. The first quarterly report should be filed within 120 days of the effective date of the Decision in this matter. Staff further recommends that the reporting may end, if the Company shows that average water loss for two consecutive quarters is below 10 percent.

If after eighteen months of the effective date of the Decision in this matter the Company has failed to reduce its non-account water below 15 percent, Staff further recommends that any new Main Extension Agreements submitted by the Company should be denied until the Company shows that average water loss for two consecutive quarters is below 15 percent.

If the Company finds that water loss can only be reduced to less than 15 percent, but not less than 10 percent within eighteen months after the effective date of the Decision in this matter, the Company shall submit, by December 31, 2005, or prior to its next rate case whichever comes first, a detailed cost analysis and explanation demonstrating why a water loss reduction to less than 10 percent is not cost effective. (See §E of report for discussion and details).

3. Well No. 9 is not used and useful, due to bacteria infection. According to the well drilling log report in the Arizona Department of Water Resources ("ADWR") database, the cost of drilling this well was \$4,900 in 1962. Staff estimates that the cost of the 3-HP pump was

\$322 in 1962. (See §L of report for discussion and details.)

- 4. Water testing expenses are based upon participation in the ADEQ Monitoring Assistance Program ("MAP"). Annual testing expenses should be adjusted to \$4,088, the level described in Table 8. (See §J of report for discussion and details.)
- 5. Staff recommends that the fire hydrants be removed from rate base as not used and useful.
- 6. Staff has no objection to the Company's proposal to increase its Hook-up Fee Charge for a 1/8 x 3/4 inch meter to \$800. (See §L of report for discussion and details.)

Conclusions:

- 1. The most recent lab analysis by the Company indicated that the arsenic levels in the Company's supply are below the new arsenic MCL. (See §D of report for discussion and details.)
- 2. According to the Utilities Division Compliance Unit, the Company has no outstanding ACC compliance issues. (See §I of report for discussion and details.)
- 3. The Company is not in any ADWR Active Management Area. (See §H of report for discussion and details.)
- 4. Arizona Department of Environmental Quality ("ADEQ") has determined that Mt. Tipton Water Co ("Mt. Tipton" or "Company") is currently delivering water that meets water quality standards required by Arizona Administrative Code, title 18, Chapter 4. (See §G of report for discussion and details.)

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ENGINEERING REPORT FOR MT. TIPTON WATER COMPANY, INC. DOCKET NO. W-02105A-03-0303 (RATES)

A. PURPOSE OF REPORT

This report was prepared in response to the application for a rate increase by Mt. Tipton Water Company, Inc. ("Mt. Tipton" or "Company"). An inspection and evaluation of the Mt. Tipton water system was conducted by Dorothy Hains, Utility Engineer, accompanied by Charles Myhlhousen, Public Utilities Analyst, and Kevin Teter, the Company's water system Operator, on October 6 and 7, 2003.

B. LOCATION OF SYSTEM

The Company's service area is approximately 35 miles northeast of the City of Kingman in Mohave County. Exhibit 1 shows the approximate 11 square-miles of certificated area, and Exhibit 2 shows the location of the Company within Mohave County.

C. DESCRIPTION OF SYSTEM

I. System Description

The Company owns and operates a water system that consists of eight wells, ten storage tanks and one pressure tank and a distribution system. Exhibits 3A and 3B are schematic drawings of the water system; a detailed description of the facility's system is as follows:

Table 1. Well Data

Well Name	ADWR ID No.	Pump HP	Yield GPM	Casing Size (in inch) & Depth (in ft)	(Meter Size inch)	Year drilled
Well #1	55-606511	15	40	8" x 600'	2	1972
Well #2	55-508835	15	32	8" x 700'	2	1984
Well #3	55-520733	5	7	8" x 540'	2	1988
Well #4	55-502441	50	253	8" x 640"	4	1982
Well #5	55-510178	15	44	8" x 900'	3	1985
Well #6	55-601846	71/2	40	6%" x480'	2	1966
Well #7	55-601847	7½	40	6%" x500'	2	1978
Well #8 (horizontal Well)	55-601848	N	10	2" x 147' (horizontal)	1½	1972
Well #9 (spring well)	55-601849	10	25	8" x 356'	1½	1962
·		TOTAL:	467 GPM			·

Table 2. Storage Tanks

Capacity (Gallons)	Quantity (Each)	Location	
10,000	1	Pierce Ferry Rd (Dolan Springs)	
8,500	2	Pierce Ferry Rd (Dolan Springs)	
25,000	1	Hill Storage Tanks Site (Dolan Springs)	
50,000	1	Hill Storage Tanks Site (Dolan Springs)	
70,000	1	Foothill of "Horizontal Well (Dolan Springs)	
50,000	1	Tank Site #1 (Mt. Tipton)	
85,000	1	Tank Site #1 (Mt. Tipton)	
50,000	1	Tank Site #2 (Mt. Tipton) installed in 1988.	
200,000	1	Tank Site #2 (Mt. Tipton), installed in 1999.	
Totals: 557,000 gallons	10 ·		

Table 3. Booster Systems

Location	Plant Facilities	Comments
@ Well #1 Site (Ironwood Ave.)	3-Hp Booster pump	
	A concrete structure (10"x 12")	
@ Tank Site #1.	Two 5-HP Booster pump	Installed in 2003. Included in Table 2: 50,000 gal. & 85,000 gal storage tanks
	20'x20' concrete building	
@ Well #6 site.	One 10-HP Booster pump	Included in Table 2: 10,000 gal. & 8,500 gal storage tanks
	One 7½-HP Booster pump	Included in Table 2: 10,000 gal. & 8,500 gal storage tanks
	10' x 10' Building	

Table 4. Distribution Mains

Diameter	Material	Length
8 inch	polyvinyl chloride ("PVC")	11,490 feet
6 inch	PVC	76,580 feet
4 inch	PVC	29,645 feet
3 inch	PVC	680 feet
2 inch	PVC	8,945 feet

Table 5. Meters

Size	Quantity
5/8 x 3/4 inch	800
1 inch	2
1½ inch	2
2 inch	1
4 inch (comp)	1

Prior to 2002, the Company only owned the Mt. Tipton system. In Decision No. 64287 (issued on December 28, 2001), the Commission approved Mt. Tipton's purchase of the Dolan Springs Water Company. In early 2002, the Mt. Tipton system (except Well No. 4) and the Dolan Springs system (except Well No. 9 which had a bacteria problem) were interconnected. After water from the wells is pumped into storage tanks, customers receive the water through a gravity flow distribution system. Although the Company installed two fire hydrants (one in 1980 and another in 2002), the system was not designed to carry fire flow.

II. System Analysis

The consolidated system has adequate production and storage capacity to support the existing customer base. Although there are fire hydrants installed in the system, it is Staff's opinion that the system cannot provide adequate fire flow. Because of this, Staff recommends that the fire hydrants be removed from rate base as not used and useful.

D. ARSENIC

The U.S. Environmental Protection Agency ("EPA") has reduced the arsenic maximum contaminant level ("MCL") in drinking water from 50 micrograms per liter ("µg/l") to 10 µg/l. The date for compliance with the new MCL is January 23, 2006. The most recent lab analysis by the Company indicated that the arsenic levels in the Company's supply are below the new arsenic MCL.

E. WATER USAGE

Table 6 summarizes the water usage in the Company's CC&N area. Exhibit 4 is a graph that shows the Company's water consumption data during the test year 2002.

Table 6 Water Usage

Month	Number of Customers	Water Sold (gallons)	Water pumped (gallons)	Water purchased	Water Loss	Daily Average (gal/day/customer)
		,		(gallons)		
Jan 02	736	3,694,000	4,612,000	0	19.90	162
Feb 02	726	3,410,000	4,369,000	. 0	21.95	168
Mar 02	734	3,415,000	4,192,000	0	18.54	150
Apr 02	743	4,440,000	5,303,000	0	16.27	199
May 02	735	5,131,000	5,907,000	0	13.14	225
Jun 02	738	5,658,000	6,319,000	0	10.46	256
Jul 02	736	5,478,000	6,735,000	0	18.66	240
Aug 02	741	5,915,000	7,195,000	0	17.79	257
Sep 02	739	4,777,000	5,882,000	0	18.79	215
Oct 02	732	3,965,000	5,672,000	0	30.10	175
Nov 02	726	3,370,000	4,718,000	0	28.57	155
Dec 02	724	3,010,000	3,594,000	0	16.25	134
Jan 03	725	3,654,000	4,894,000	0	25.34	163
Total		55,917,000	69,392,000	0		
Average					19.42	195

I. Water Sold

Based on information provided by the Company, during the test year the Company experienced a daily average usage of 195 gallons per day ("gpd") per customer, a high usage of 257 gpd per customer and a low usage of 134 gpd per customer. The highest monthly usage occurred in August, when 5,915,000 gallons were sold to 741 customers. The lowest monthly usage occurred in December, when 3,010,000 gallons were sold to 724 customers.

II. Non-account Water

Non-account water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, theft, and flushing. Non-account water for Mt. Tipton was calculated to be 19.42 percent annually, which exceeds an acceptable limit. Records also indicate that the Company had non-account water exceeding 20 percent for four of the months during the test year.

Staff recommends that the Company reduce its water loss to less than 10 percent within eighteen months after the effective date of the Decision in this matter. Staff further recommends that the Company file quarterly reports with the Director of the Utilities Division, indicating the quantity of water pumped and sold each month during the quarter and the efforts made to reduce water loss, such as number of leaks repaired, meters replaced, pipeline flushing, etc. The first quarterly report should be filed within 120 days of the effective date of the Decision in this matter. Staff further

recommends that the reporting may end, if the Company shows that average water loss for two consecutive quarters is below 10 percent.

If after eighteen months of the effective date of the Decision in this matter the Company has failed to reduce its non-account water below 15 percent, Staff further recommends that any new Main Extension Agreements submitted by the Company should be denied until the Company shows that average water loss for two consecutive quarters is below 15 percent.

If the Company finds that water loss can only be reduced to less than 15 percent, but not less than 10 percent within eighteen months after the effective date of the Decision in this matter, the Company shall submit, by December 31, 2005, or prior to its next rate case whichever comes first, a detailed cost analysis and explanation demonstrating why a water loss reduction to less than 10 percent is not cost effective.

F. GROWTH PROJECTION

Exhibit 5 details total actual and projected growth for the system using linear regression analysis. The number of service connections was obtained from annual reports submitted to the Commission. Based on the service meter data contained in these reports, the number of connections increased from 522 at the end of 1994 to 724 by the end of 2002, with an average growth rate of 10 connections per year. Based on the linear regression analysis, the Company could have approximately 826 customers by the end of 2007. The following table summarizes actual and projected growth in the Company's existing certificated service area.

Table 7. Actual and Projected Growth

Year	Nos. of Customers	
1994	677 [*]	Reported
1995	687*	Reported
1996	689 [*]	Reported
1997	707*	Reported
1998	758 [*]	Reported
1999	784 [*]	Reported
2000	800*	Reported
2001	740*	Reported
2002	724	Reported
2003	783	Estimated
2004	794	Estimated
2005	805	Estimated
2006	816	Estimated
2007	826	Estimated

Note: "*"sum of the number of customers for both the Dolan Springs system and Mt. Tipton system.

G. ARIZONA DEPARTMENT OF ENVIONMENTAL QUALITY ("ADEQ") COMPLIANCE

Staff received a memorandum from ADEQ on December 19, 2003, in which ADEQ stated that ADEQ determined the water system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

H. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Mt. Tipton is not in any ADWR Active Management Area. Therefore, the Company is not subject to ADWR's gallons per capita per day ("gpcd") limit and conservation rules.

I. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

According to the Utilities Division Compliance Unit, the Company has no outstanding ACC compliance issues.

J. WATER TESTING EXPENSES

Mt. Tipton is subject to mandatory participation in the ADEQ Monitoring Assistance Program ("MAP"). Staff calculated the testing costs based on the following assumptions:

- 1. MAP will do baseline testing on everything except copper, lead, nitrates, and coliform bacteria.
- 2. ADEQ testing is performed in 3 year compliance cycles. Therefore, monitoring costs are estimated for a 3 year compliance period and then presented as a pro forma expense on an annualized basis.
- 3. MAP fees were calculated from the ADEQ MAP rules.
- 4. All monitoring expenses are based on Staff's best knowledge of lab costs and methodology and two points of entry.
- 5. The estimated water testing expenses represent a <u>minimum</u> cost based on no "hits" other than lead and copper, and assume compositing of well samples. If any constituents were found, then the testing costs would dramatically increase.

Table 8 shows the estimated annual monitoring expense, assuming participation in the MAP program. Water testing expenses should be adjusted to the annual expense amount shown in Table 8, which is \$4,088.

Table 8 Water Testing Cost

Monitoring – 9 wells (Tests per 3 years, unless noted.)	Cost per test	No. of tests per 3 years	Total 3 year cost	Annual Cost
Bacteriological – monthly	\$15	216	\$3,240	\$1,080
Inorganics (& secondary)	\$240	6	\$1,440	\$480
Radiochemical – (1/4 yr)	\$55		·	MAP
IOC's, SOC's, VOC's				MAP
Nitrites	\$15			MAP
Nitrates – annual	\$25	18	\$450	\$150
Asbestos – per 9 years	\$180			MAP
Lead & Copper – annual	\$25	60	\$1,500	\$500
MAP fees (annual)				\$1,878.25
Total				\$4,088

K. DEPRECIATION RATES

Staff has developed typical and customary depreciation rates within the range of anticipated equipment life. These rates are presented in Exhibit 6, and were used to re-calculate the annual depreciation expense for the Company. It is recommended that the Company use depreciation rates by the National Association of Regulatory Utility Commissioners ("NARUC") category, as delineated in Exhibit 6.

L. <u>OTHERS</u>

I. Service Line and Meter Installation Charges

The Company has requested to change its meter and service line charges. These charges are refundable advances and the Company's proposed charges are within Staff's experience of reasonable and customary charges. Therefore, Staff accepts the Company's proposed meter and service line installation charges.

Service Line and Meter Installation Charges

Meter Size	Current Charges	Proposed Charges	Staff Recommendation
5/8 x3/4-inch	\$350	\$437.5	\$438
3/4-inch	\$370	\$462	\$462
1-inch	\$450	\$562	\$562
1-½-inch	\$670	\$837.5	\$838
2-inch	\$875	\$1,093.75	\$1,094
3-inch	\$1,025	\$1,281.25	\$1,281
4-inch	\$2,700	\$3,375	\$3,375
6-inch	\$3,825	\$4,781.25	\$4,781
8-inch	N/A	5,000	5,000

II. Offsite Facilities Hook-up Fees

In Decision No. 60988, effective July 15, 1998, the Commission approved a Hook-up Fee Charge to install the Detrital Well Improvements: eight miles of new transmission main, a booster station, and a 200,000 gallon storage tank. During its field inspection, Staff observed that the 200,000 gallon storage tank and a booster station within the Detrital Well (Well #4) Site had been completed and were in use. However, the construction of eight miles of transmission main to connect the Detrital Well with the storage tanks has not even begun. Because the Detrital Well produces more than 50% of the Company's total well production and the delivery system is designed for gravity flow, it is necessary to connect the Detrital Well and the storage tanks in order to meet the peak demand especially during drought conditions. Therefore, Staff concludes that this improvement would be beneficial in ensuring that an adequate source of water is available to the system.

In Decision No. 60988, the Commission approved a Hook-up Fee Charge of \$700 for a ½ x ¾ inch meter contingent upon the Company obtaining an award for a Community Development Block Grant ("CDBG") for the purchase and installation of a new storage tank. The Commission's Decision also provided that if the CDBG was not awarded, then the hook-up fee should be calculated on a basis of \$800 for a ½ x ¾ inch meter. The current tariffed rate is \$700 and the Company is proposing to increase this rate to \$800 since, according to the Company, it never received the CDBG award for the new storage tank. Therefore, Staff has no objection to the Company's proposal to increase its Hook-up Fee Charge for a ¼ x ¾ inch meter to \$800.

Hookup fee Charges

Meter Size	Current Charges	Proposed Charges	Staff Recommendation
5/8 x3/4-inch	\$700	\$800	.\$800
3/4-inch	\$840	\$840	\$840
1-inch	\$1,400	\$1,400	\$1,400
1-½-inch	\$2,800	\$2,800	\$2,800
2-inch	\$4,480	\$4,480	\$4,480
3-inch	\$8,400	\$8,400	\$8,400
4-inch	\$14,00	\$14,00	\$14,00
6-inch or larger	\$28,00	\$28,00	\$28,00

III. Well No. 9

Because bacteria test results showed positive in Well No. 9 during the test year, the Company has disconnected this well from the rest of its system. Staff therefore considers this well and the associated well pump not "used and useful" for utility purposes during the test year and recommends that the appropriate adjustments be made to the Company's test year rate base. According to the well drilling log report in ADWR's database, the cost of drilling this well was \$4,900 in 1962. Staff estimates that the cost of the 3-HP pump was \$322 in 1962.

EXHIBIT 1

Mt. Tipton's Certificate Service Area

COUNTY: Mohave

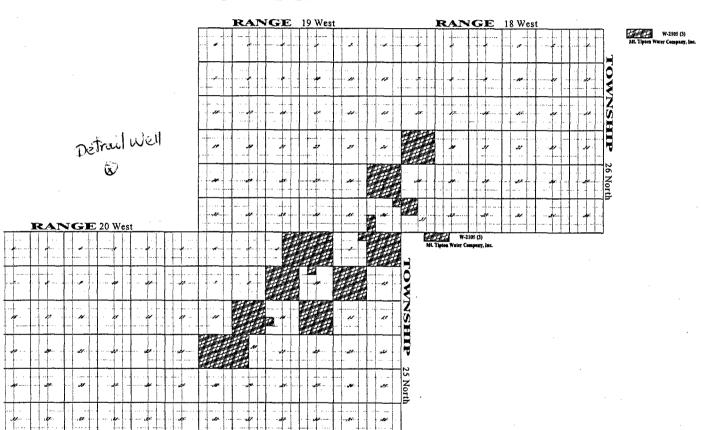
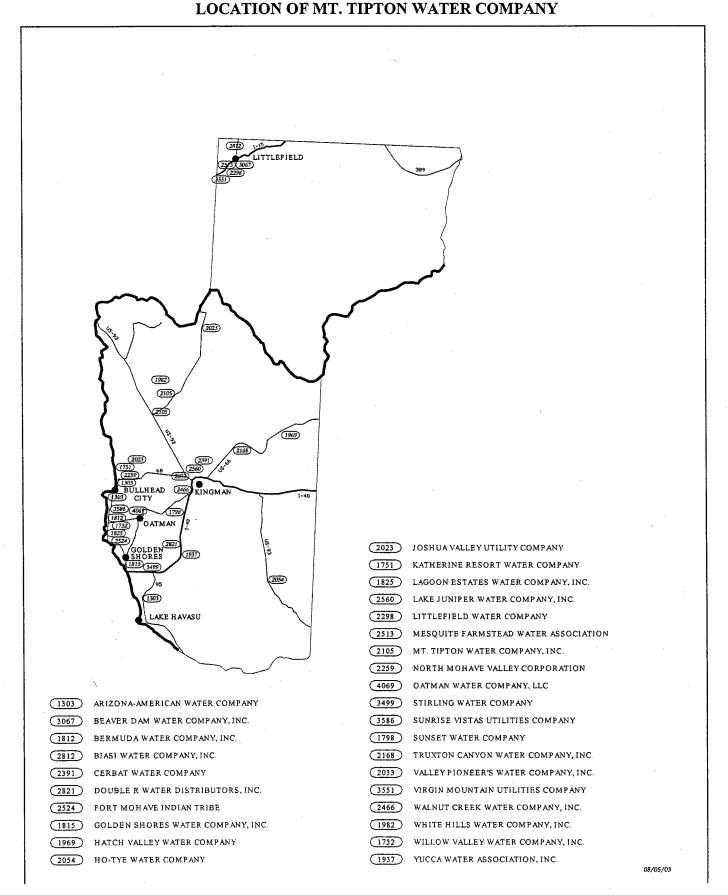


EXHIBIT 2.



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EXHIBIT 3A.

SYSTEMATIC DRAWING

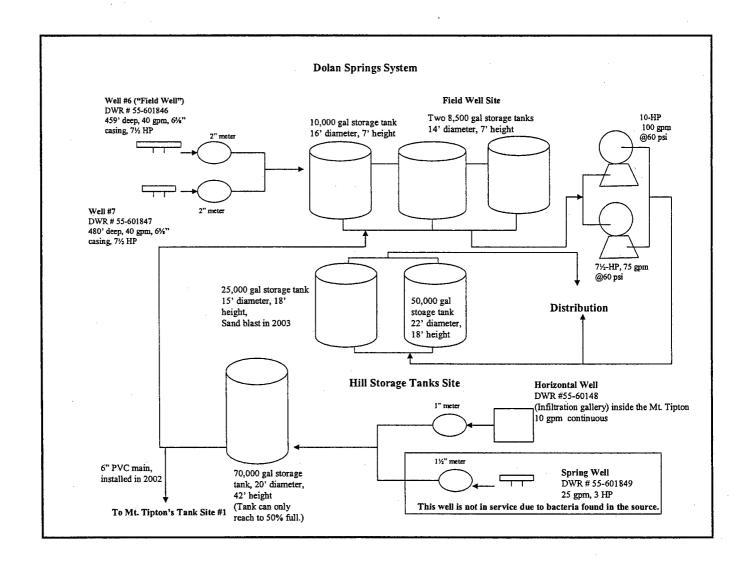


EXHIBIT 3B.

SYSTEMATIC DRAWING

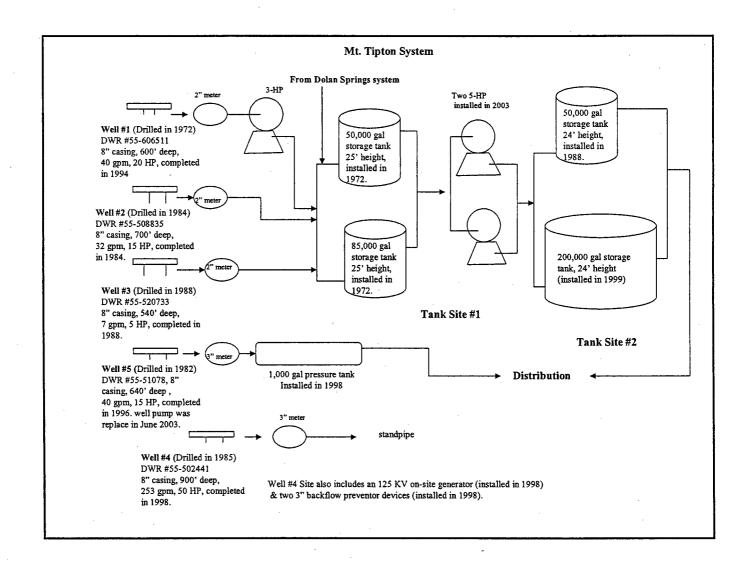


EXHIBIT 4
WATER USAGE IN THE MT. TIPTON WATER SERVICE AREA

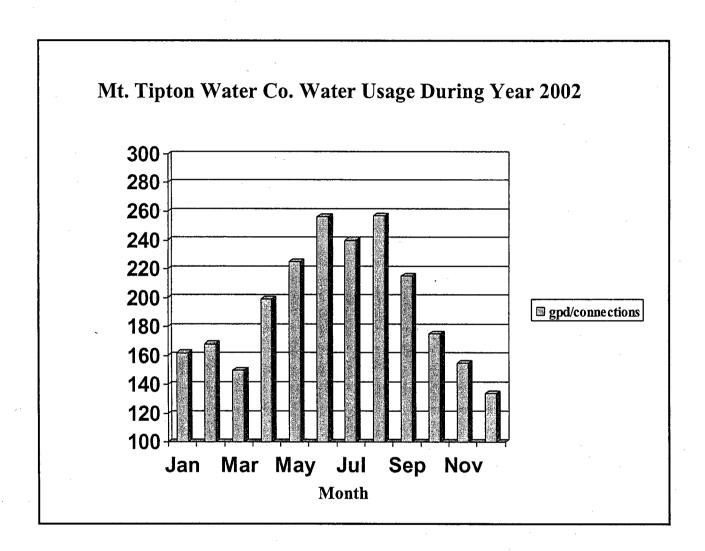


EXHIBIT 5

ACTUAL AND PROJECTED GROWTH IN MT. TIPTON SERVICE AREA

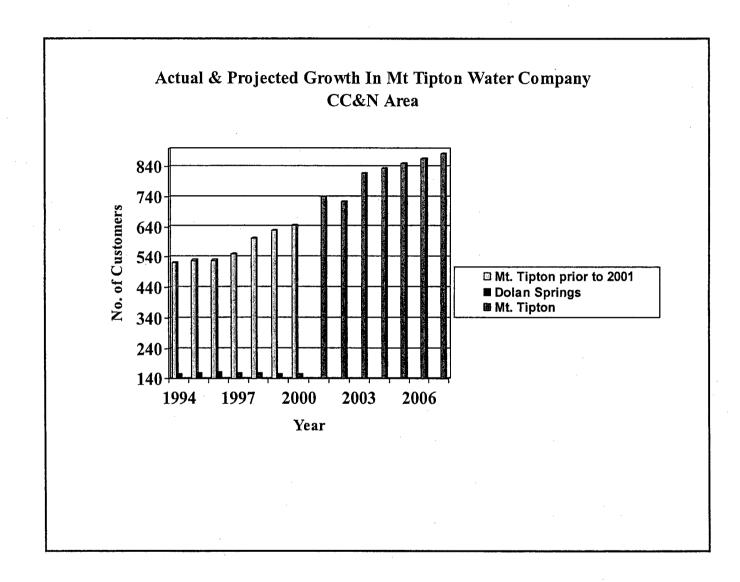


Exhibit 6
Water Depreciation Rates

		Average	Annual
Acct.	Depreciable Plant	Service	Accrual
No.		Life	Rate (%)
		(Years)	`
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs &		
	Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant		